JVC

SERVICE MANUAL

MODEL
RC-545L/LB

FM-SW-MW-LW
4-BAND RADIO
STEREO CASSETTE
RECORDER

No. 1388
February 1979

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Specifications

DIMENSIONS: 24.1cm(H) x 42.4cm(W) x 11.4cm(D)
9-1/2" x 16-3/4" x 4-1/2"

WEIGHT: Approx. 4.5 kg (with batteries)
9.9 lbs.

TUNER SECTION		
Frequency Ranges	:	FM 88~108MHz
		SW 6~18MHz
		MW 540~1600kHz
		LW 150~350kHz
RECORDER SECTION		
Tape Speed	:	4.8 cm/s (1-7/8 ips)
Track System	:	4-track 2-channel stereo
Recording System	:	AC Bias
Erasing System	:	DC Erasing
S/N Ratio	:	More than 40dB at 1kHz
Fast Forward Time	:	Within 90 sec. (C-60 cassette)
Rewinding Time	:	Within 90 sec. (C-60 cassette)
Wow & Flutter	:	0.14% (WRMS)
AMPLIFIER SECTION		
Speakers	:	12 cm (5") x 2, 3.2Ω
Power Output	:	Max. 5.4W (2.7W+2.7W)(DC)
		4W (2W+2W)(DC) at 10% THD
Input Jacks	:	MIC x 2 (0.8mV, low imp.)
Output Jacks	:	Ext. Speaker x 2 (3.2~8Ω)
		Headphones x 1 (8Ω)
Input/Output Jack	:	DIN
POWER CONSUMPTION	:	12W (RC-545L)
		9.5W (RC-545LB)
SEMICONDUCTORS		
ICs	:	5 + 2 (Microphone)
Transistors	:	10 + 2 (Motor governor)
Diodes	:	14
POWER SOURCE		
DC	:	9V, 6 "R20", "U2" cells or equivalent
AC	:	110/220/240V, 50/60Hz

Main Parts Location

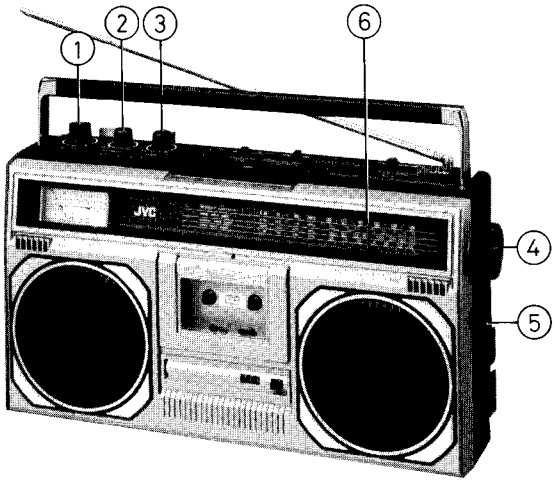


Fig. 1

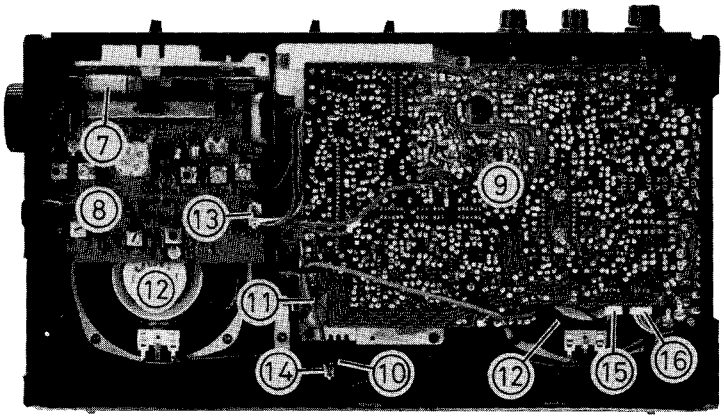


Fig. 2

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	*VXL4045-001	Knob	VOLUME	1
2	*VXKM520-30012	"	BALANCE	1
3	*VXKM520-30012	"	TONE	1
4	VXL4021-001	"	Tuning	1
5	VXKM520-20010	"	FINE TUNING	1
6	*VJN4022-001	Pointer		1
7	*VQB012B-303	Bar Antenn Ass'y	L4, 5	1
8	*————	Circuit Board Ass'y	Tuner	1
9	*————	"	Amplifier	1
10	*————	"	Connector	1
11	*————	Cassette Mechanism Ass'y		1
12	EAS12P126SH	Speaker	12cm(5"), 3.2Ω	2
13	*VDM5049-004-002	Connector & Wire Ass'y	CN1-S	1
14	*VDM5049-004-001	"	CN304-S	1
15	*VDM5049-004-004	"	CN303-S	1
16	*VDM5049-004-003	"	CN302-S	1

Note:
1. Asterisked parts (*) show "NEW PARTS". Other parts are all "CURRENT PARTS"; therefore, check your inventory and order situation before placing new order to avoid making extra stock.
2. The circuit board assemblies and whole assembly of cassette mechanism in this model will not be available as spare parts.
3. The parts marked ⚠ are the important parts for safety assurance. Use the specified part, when replacing the safety assurance part, never use an equivalent one.

Disassembly & Replacement

A. Rear Cabinet

1. Remove the battery cover.
2. Remove 7 screws (1)~(7): SDSB3020R.
3. Disconnect 3 connectors from the rod antenna (white) and power supply section (red & black).

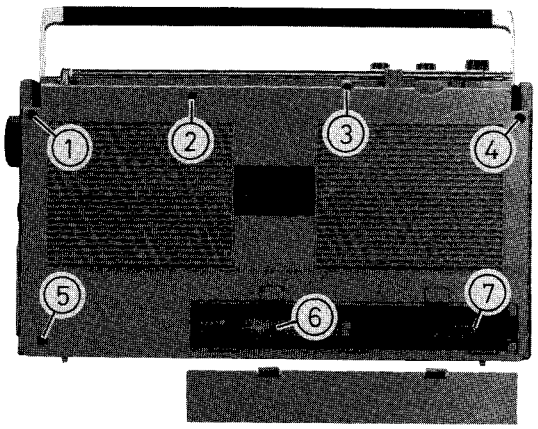


Fig. 3

B. Tuner Section

1. Set the tuning dial to the minimum frequency.
2. Take off the tuning and fine tuning knobs.
3. Disconnect the 5-pin connector (A) from the amplifier section and a connector to the speaker terminal.
4. Remove 2 screws (8) & (9): SBSB3025C.

Note: Engage the pointer on the front cabinet with the pointer holder on the tuner chassis, as the pointer separates from the holder by removing the tuner section from the cabinet, when mounting the tuner section on the cabinet.
For details refer to page 9.

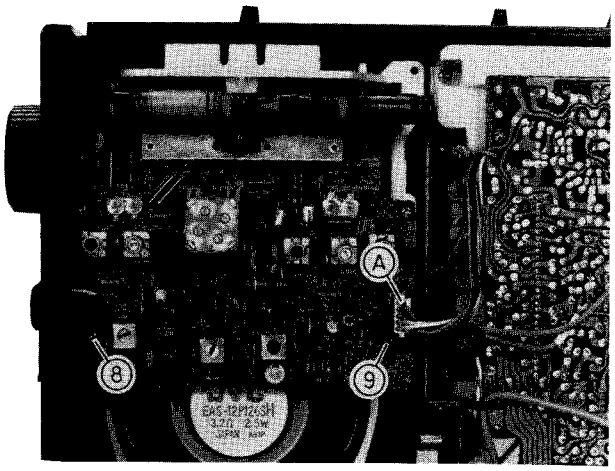


Fig. 4

C. Amplifier Circuit Board

1. Take off the volume, balance and tone control knobs.
2. Disconnect 3 connectors (B), (C) & (D).
3. Remove 5 screws (10)~(13): SPSP3006VS and (14): SBSB3014C.

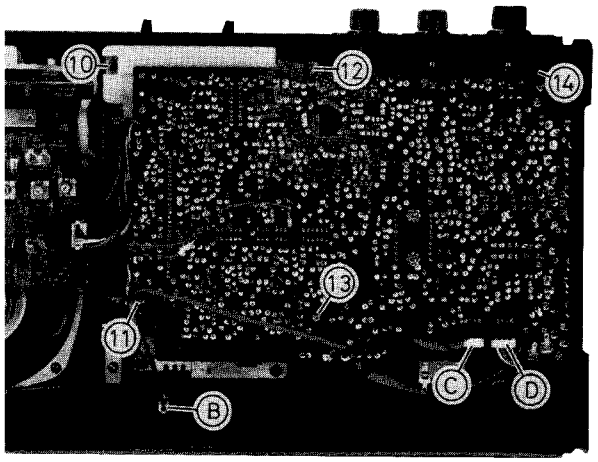


Fig. 5

D. Amplifier Section (with Cassette Mechanism)

1. Take off the volume, balance and tone control knobs.
2. Disconnect 4 connectors (A), (B), (C) & (D).
3. Remove 5 screws (14)~(18): SBSB3014C.
4. Open the cassette case by depressing the STOP/EJECT button to disengage the internal mechanism.

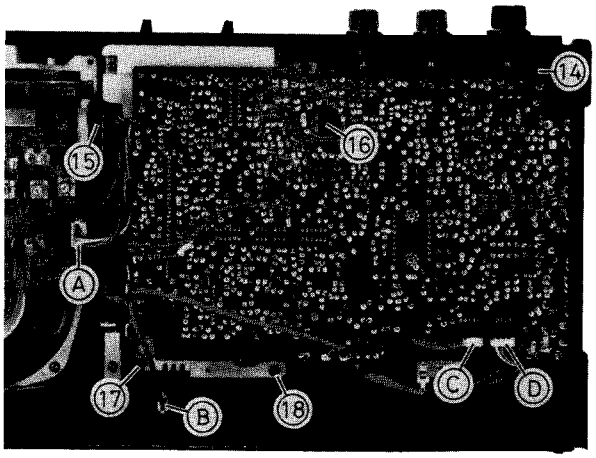


Fig. 6

E. Cassette Mechanism

1. Remove the amplifier section in accordance with the item D.
2. Remove 4 screws (10)~(13): SPSP3006VS.
3. Desolder wires from the motor, heads and leaf switch on the cassette mechanism.

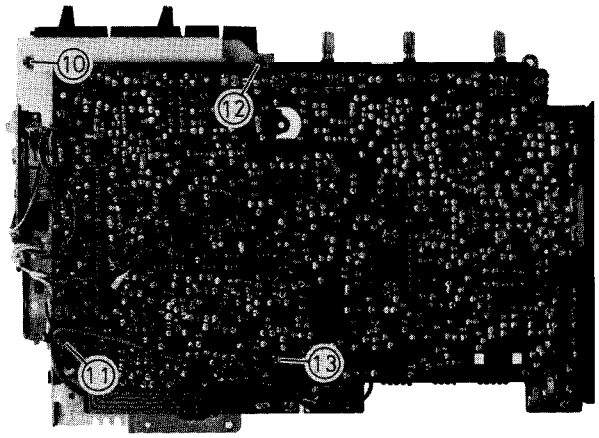


Fig. 7

F. Jack Board

1. Remove the amplifier circuit board as following the item C.
2. Remove 2 screws (19) & (20): SBSB3010Z.

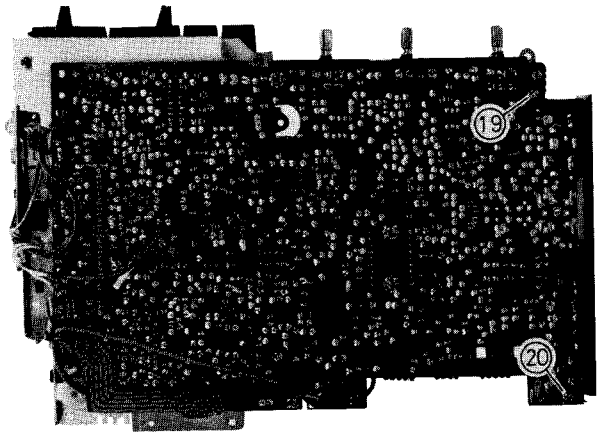


Fig. 8

G. Power Supply Section

Remove 2 screws (21) & (22): SBSB3014C.

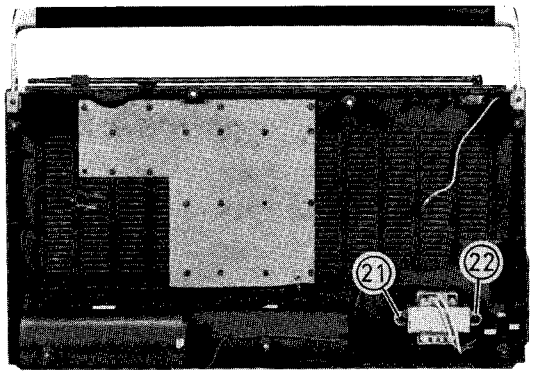


Fig. 9

H. Component Parts of Cassette Mechanism

The cassette mechanism of RC-545 is the essentially the same as of RC-525 and RC-323.
Refer to the service manual of RC-525 or RC-323.

Tuner Alignment

Output Measuring: Speaker terminal (Impedance = 3.2Ω), output level 50mW (0.4V/3.2Ω)

AM IF & RF Alignment

Input (SSG) Modulation 400Hz, Modulated to 30%

Step	Frequency Band	Input Signal		Place to be aligned	Set the V. Capacitor to
		Frequency	Given to		
1	MW (IF)	455kHz	Loop Antenna	T2, 3	Minimum
2		Repeat the Step 1, and adjust for no further improvement.			
3	LW	145kHz	Loop Antenna	L7	Maximum
4		360kHz		TC6	Minimum
5		Repeat the Steps 3 & 4.			
6		160kHz	Loop Antenna	L4	160kHz Signal
7		350kHz		TC1	350kHz Signal
8		Repeat the Steps 6 & 7, and adjust for no further improvement.			
9	MW	520kHz	Loop Antenna	L8	Maximum
10		1650kHz		TC7	Minimum
11		Repeat the Steps 9 & 10.			
12		600kHz	Loop Antenna	L5	600kHz Signal
13		1400kHz		TC2	1400kHz Signal
14		Repeat the Steps 12 & 13, and adjust for no further improvement.			
15	SW	5.8MHz	Rod Antenna through Dummy Antenna	L9	Maximum
16		18.6MHz		TC8	Minimum
17		Repeat the Steps 15 & 16.			
18		6.0MHz	Rod Antenna through Dummy Antenna	L6	6.0MHz Signal
19		18.0MHz		TC5	18.0MHz Signal
20		Repeat the Steps 18 & 19, and adjust for no further improvement.			

FM IF & Discriminator Alignment

Input (Sweep Generator) : TP3 (hot)

Output (Oscilloscope) : IF TP4 (hot) & TP7
Discriminator TP6 (hot) & TP7

Step	Mode	Place to be aligned	Wave form
1	IF	T1, 4	Peak
2	Discriminator	T5	S-curve

FM RF Alignment

Input (SSG): Use 75Ω terminal, modulation 400Hz modulated to 22.5kHz deviation.
Connect Hot side to TP1 and Cold side to TP2.

Step	Frequency Band	Input Signal		Place to be aligned	Set the V. Capacitor to
		Frequency	Given to		
1	FM	87.5MHz	TP1 & TP2	L3	Maximum
2		109MHz		TC4	Minimum
3		Repeat the Steps 1 & 2.			
4		90MHz	TP1 & TP2	L2	90MHz Signal
5		106MHz		TC3	106MHz Signal
6		Repeat the Steps 4 & 5, and adjust for no further improvement.			

FM MPX Alignment

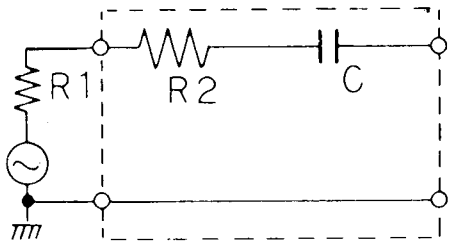
A. Regular Method

1. Connect a frequency counter to the test point TP5.
2. Supply the monaural signal (98MHz, 60dB) across the test points TP1 and TP2.
3. Adjust the variable resistor VR1 so that the frequency becomes 19kHz ± 100Hz.

B. Simplified Method

1. Tune to a FM stereo broadcast.
2. Set the variable resistor VR1 to a center position of the range where the stereo indicator keeps lighting.

Dummy Antenna



R1 + R2 = 80Ω
C = 10pF
R1 : Output impedance of S.S.G.

Fig. 10

Parts Arrangement for Alignment

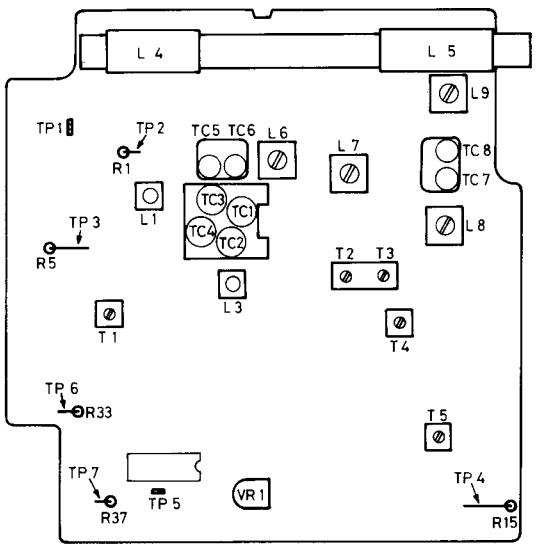


Fig. 11

Adjusting Recording Bias

Bias Frequency

1. Connect a frequency counter across TP101.
2. Set the BEAT CUT switch to left position.
3. Adjust the oscillator coil L301 so that the counter indicates 68kHz.

Bias Current

1. Connect a V.T.V.M. across TP101 and TP201.
2. Adjust the variable resistor VR101 (L) and VR201 (R) so that the voltage becomes 4.5mV (450μA/10Ω).

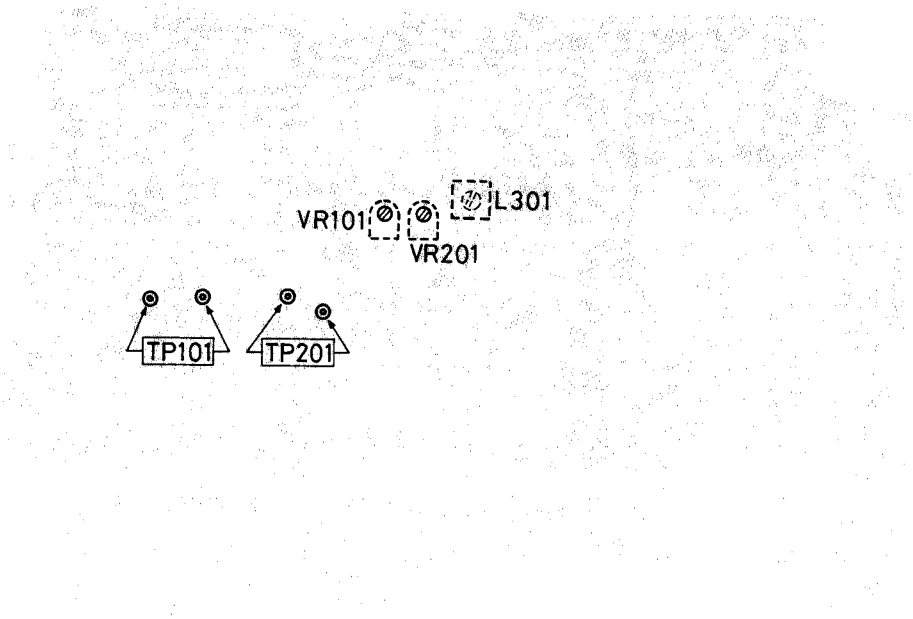


Fig. 12

Adjusting Head Azimuth

Regular Method

1. Connect a dual channel oscilloscope to the speaker terminals.
2. Set the MODE switch to the STEREO position.
3. Playback the test cassette for azimuth adjustment.
4. Adjust the head azimuth so that the output signals of left and right channels will become maximum and in phase.

Note: If a single channel oscilloscope will be used, apply the left channel signal to the X-axis and the right to the Y-axis and draw the Lissajous figure.

Simplified Method

1. Connect a V.T.V.M. across the speaker terminal.
2. Set the MODE switch to MONO.
3. Playback the test cassette for azimuth adjustment.
4. Adjust the head angle for maximum output.
   Note: The output voltage shows three peaks while adjusting head angle as illustrated on the right, adjust for maximum peak.
5. Check that the output difference between MONO and STEREO is within 3dB.

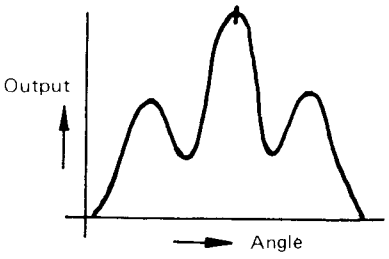


Fig. 13

How to Fit Dial Cord

A. Fit the dial Cord

1. Dial Cord
   Material : Tetoron
   Diameter of cord : 0.6mm (24 mil)
   Whole length of cord : 775mm (30-1/2")
2. Turn the dial drum fully clockwise.
3. Fit the cord in numerical order as shown in Fig. 14.
4. Fix the pointer holder to the cord and adjust the starting point.
   a. Turn the dial drum fully counterclockwise.
   b. Set the left edge of needle holder to the projected marking on the chassis as shown in Fig. 15 and fix the cord to the holder by lock paint.

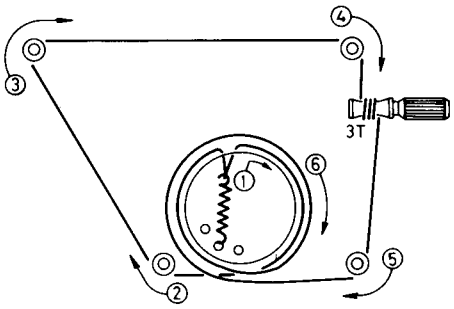


Fig. 14

B. Engaging the pointer with the pointer holder

1. Set the pointer holder to the minimum frequency by turning the dial drum fully counterclockwise.
2. Set the pointer assembled on the cabinet to the projection on the cabinet as shown in Fig. 16.
3. Mount the tuner section on the cabinet and engage the pointer with the holder.

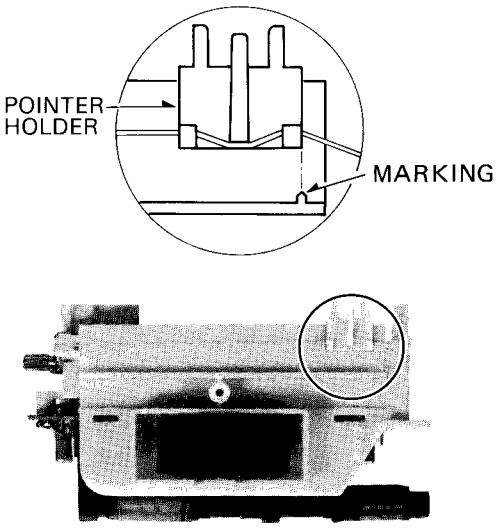


Fig. 15

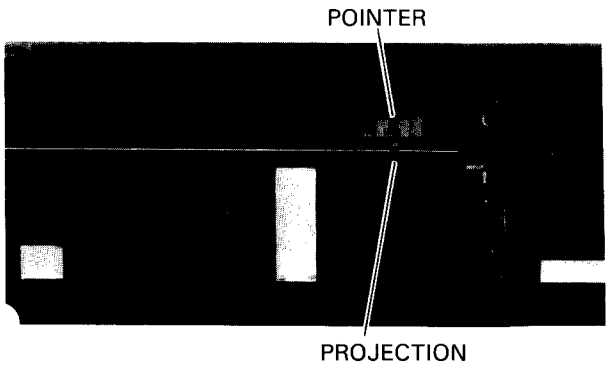


Fig. 16

Adjustment of Cassette Mechanism

Play Timing

1. In the playback mode, the clearance (A) between the pinch roller arm and the stopper of head base should be within 0.2 to 0.3 mm.
   If the clearance is beyond the limits, bend the part (B) of pinch roller arm to adjust the clearance as shown in Fig. 17.

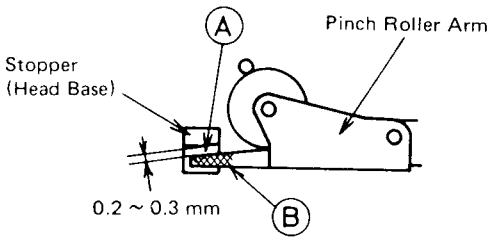


Fig. 17

2. Check to see that the take-up idler turns at the same time as the pinch roller or the take-up idler turns first and then the pinch roller turns, when the PLAY button is pressed.
   a. If the pinch roller turns very later than the take-up idler, bend the part (C) of head base which is contacted with the take-up idler by the part (D) to the (E) direction as shown in Fig. 18.
   b. If the take-up idler turns later than the pinch roller, bend the part (C) to (F) direction.

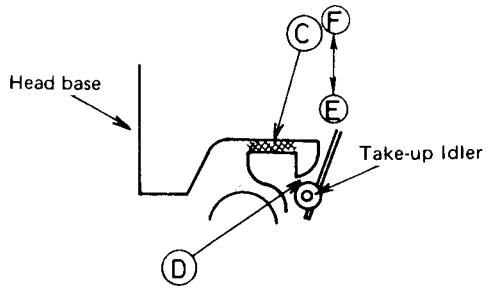


Fig. 18

Cue & Review Mechanism

1. Timing of Cue Action
   a. In the playback mode, check to see that the take-up reel disk stops turning after the pinch roller has stopped turning or stops at the same time and then the mechanism becomes fast forwarding mode when the CUE button has been pressed.
   b. If the timing is out of order, adjust it as following the item 2 of "Play Timing".
2. Timing of Review Action
   a. In the playback mode, check to see that the take-up reel disk stops turning after the pinch roller has stopped or stops at the same time and then the mechanism becomes rewinding mode, when the REVIEW button has been pressed.
   b. If the timing is out of order, adjust it as following the item 2 of "Play Timing".

Pause Timing

In the playback mode, check that the PAUSE button is locked and the mechanism temporarily becomes stop mode when the PAUSE button has been pressed, and that the button is released and the mechanism becomes playback mode when the button has been pressed again.
If the mechanism becomes fast forwarding mode, when the PAUSE button has been gradually pressed, bend the part (G) of pinch roller arm to the arrow direction to adjust that the take-up reel and the pinch roller stops at the same time as shown in Fig. 19.

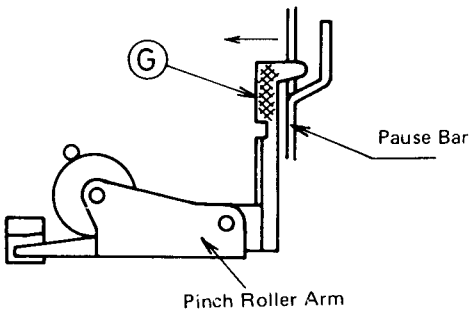


Fig. 19

Thrust of Flywheel

The clearance between the top of the flywheel shaft and the thrust screw should be within 0.1 to 0.4 mm. If the clearance is out of limits, adjust the thrust screw for normal value.

Note: After adjustment, fix the thrust screw with lock adhesive.

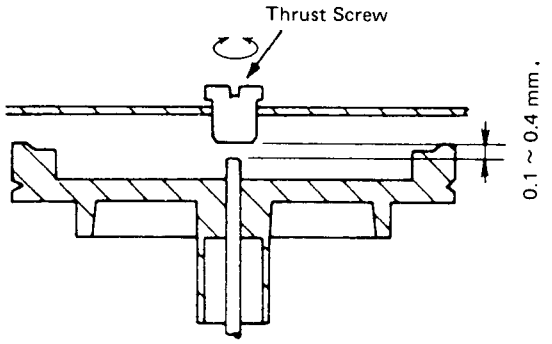


Fig. 20

Location of Heads

The play/record and erase heads should be positioned as shown below.

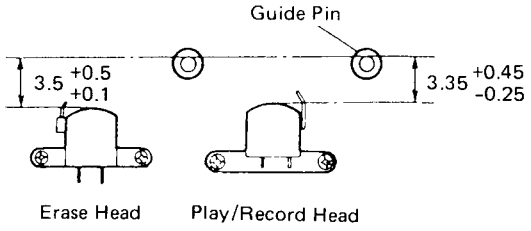


Fig. 21

Torque

Mode	Torque
PLAY	40 ~ 70 g.cm
FF	more than 60 g.cm
REWIND	more than 60 g.cm

Note: If the torque is out of limit, change the take-up reel disk.

Block Diagram

Tuner Section

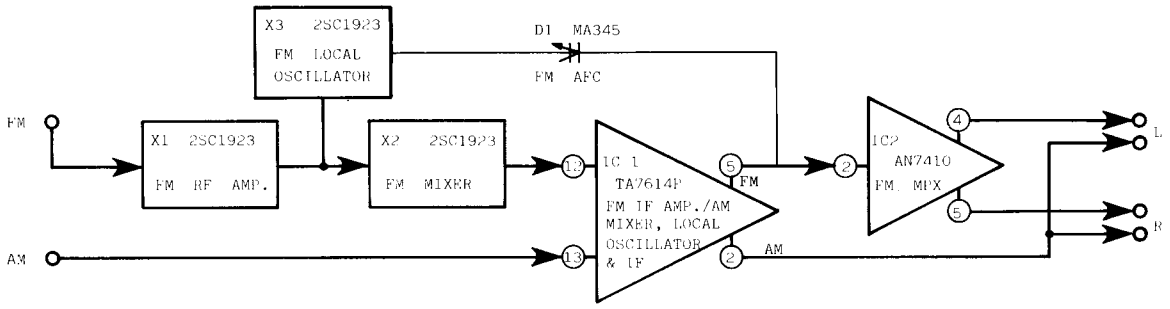


Fig. 22

Playback Mode

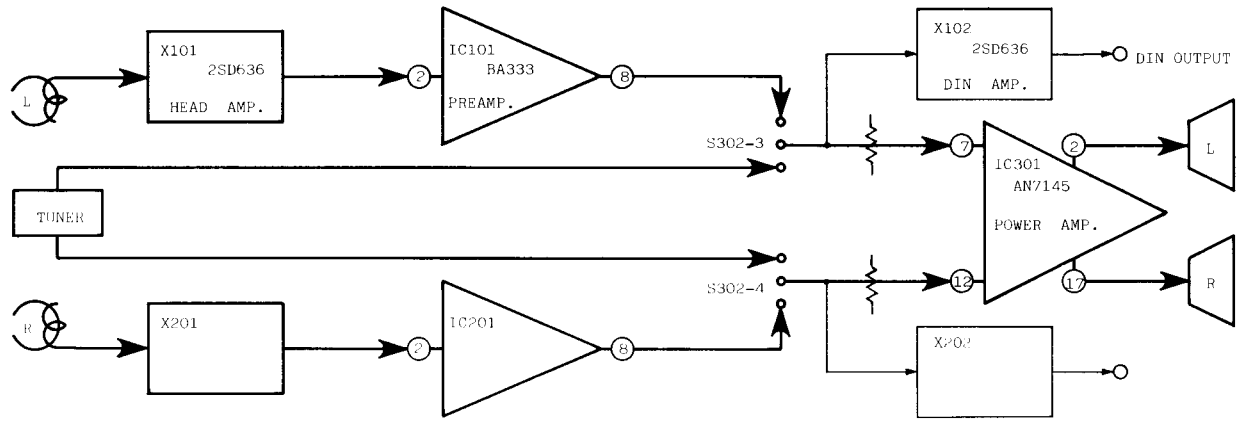


Fig. 23

Recording Mode

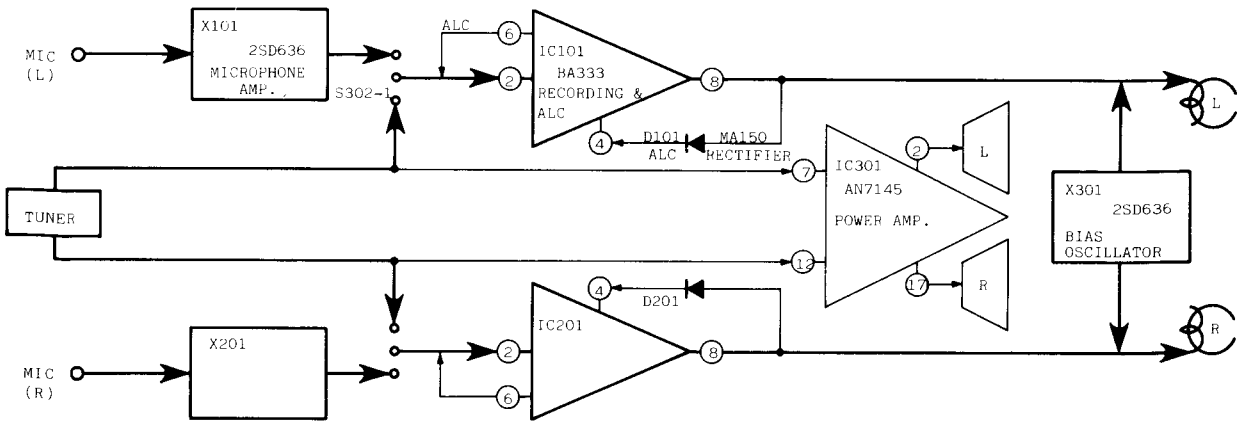


Fig. 24

Wiring Connection

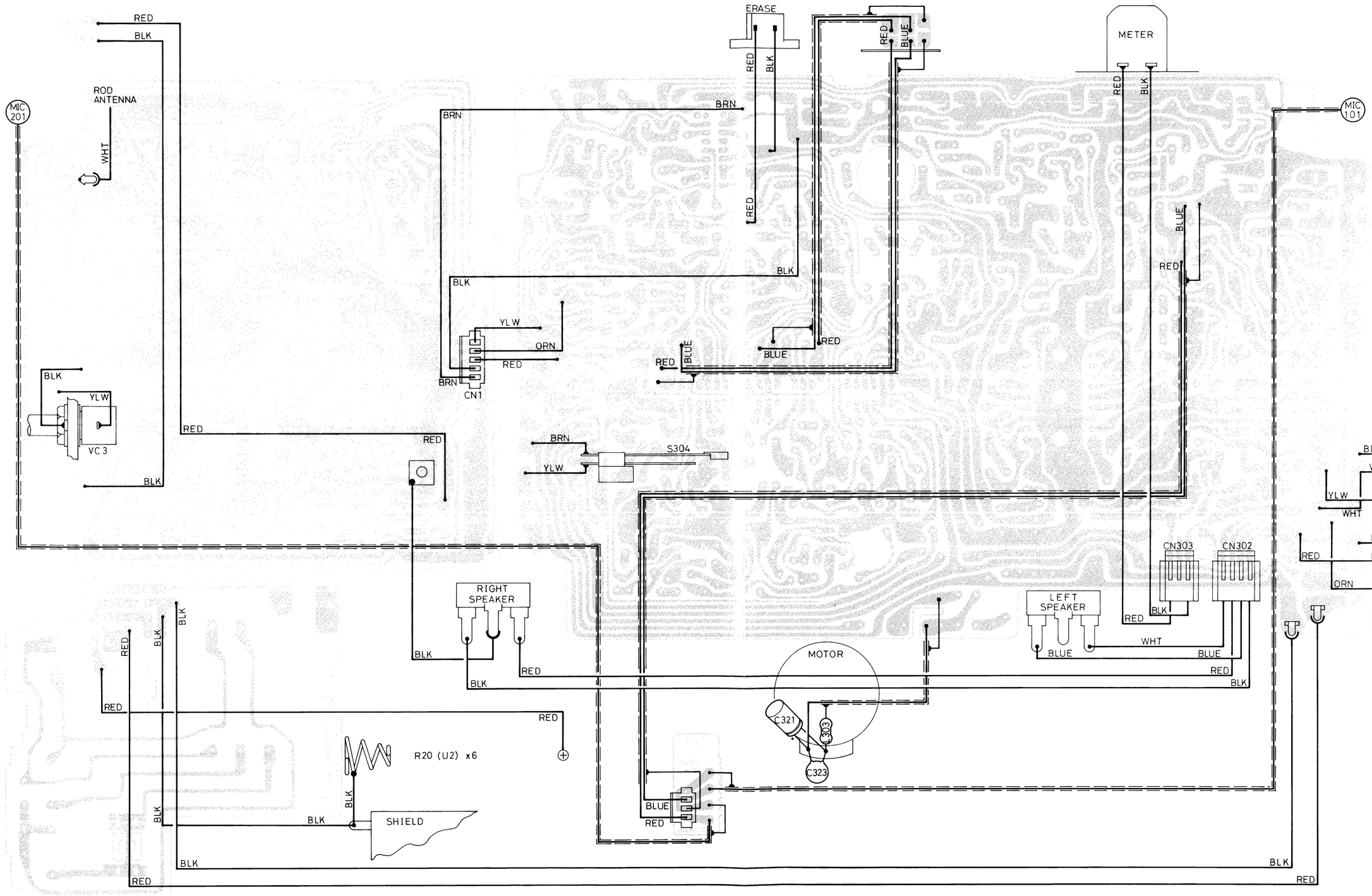
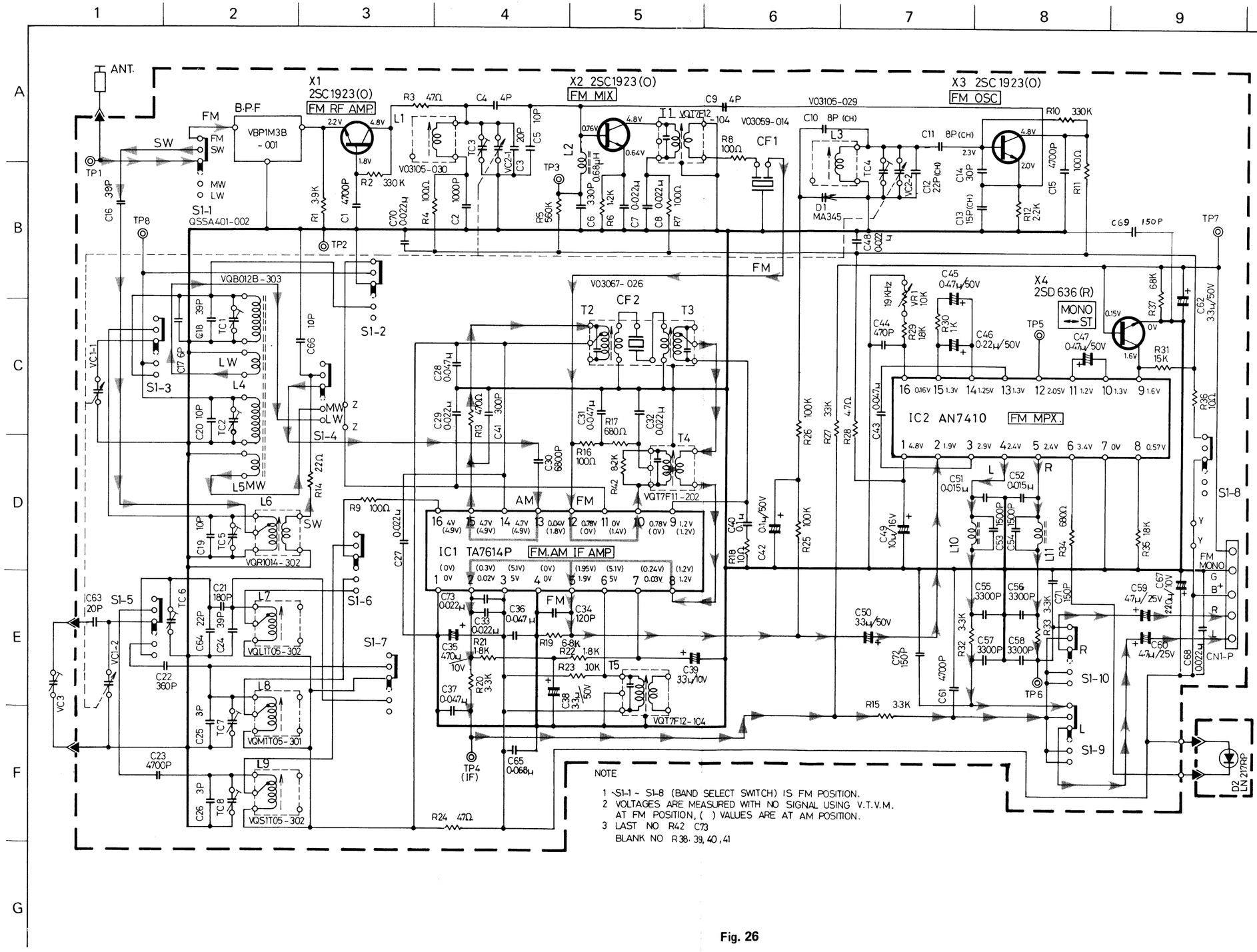
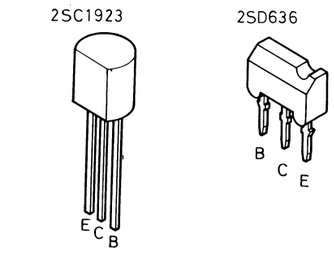
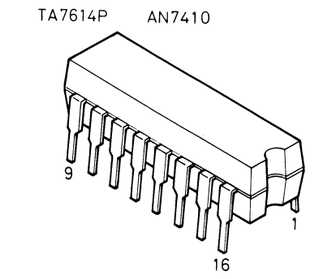


Fig. 25

Schematic Diagram of RC-545L/LB (Tuner)







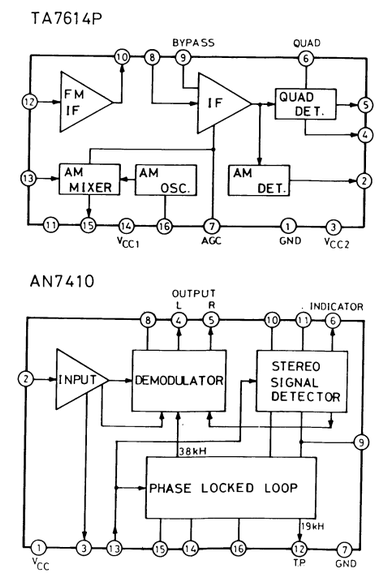
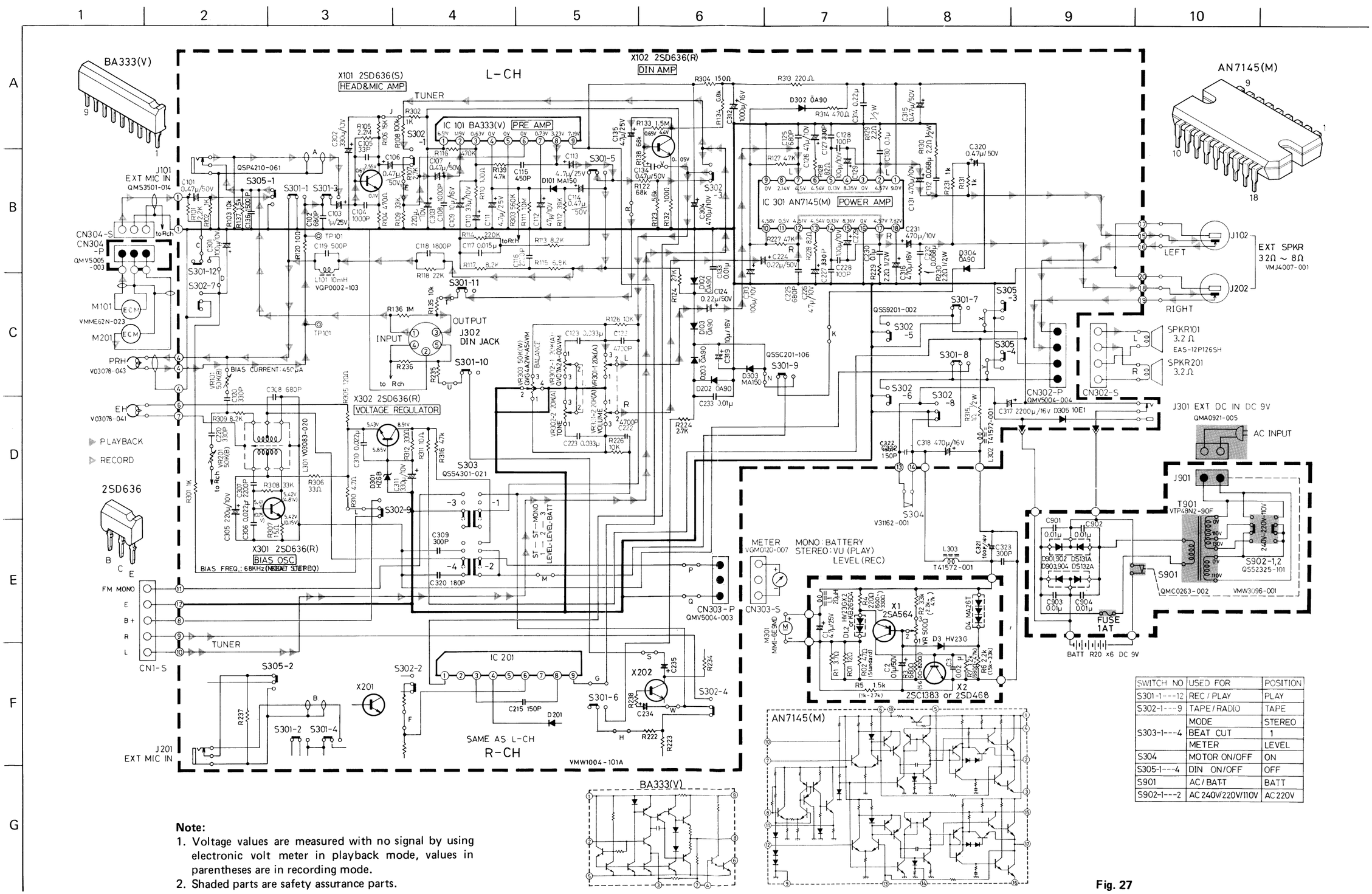


Fig. 26

Schematic Diagram of RC-545L/LB



Note:

1. Voltage values are measured with no signal by using electronic volt meter in playback mode, values in parentheses are in recording mode.
2. Shaded parts are safety assurance parts.

SWITCH NO	USED FOR	POSITION
S301-1---12	REC / PLAY	PLAY
S302-1---9	TAPE / RADIO	TAPE
S303-1---4	MODE	STEREO
	BEAT CUT	1
	METER	LEVEL
S304	MOTOR ON/OFF	ON
S305-1---4	DIN ON/OFF	OFF
S901	AC / BATT	BATT
S902-1---2	AC 240V/220V/110V	AC 220V

Fig. 27

Tuner Circuit Board Ass'y

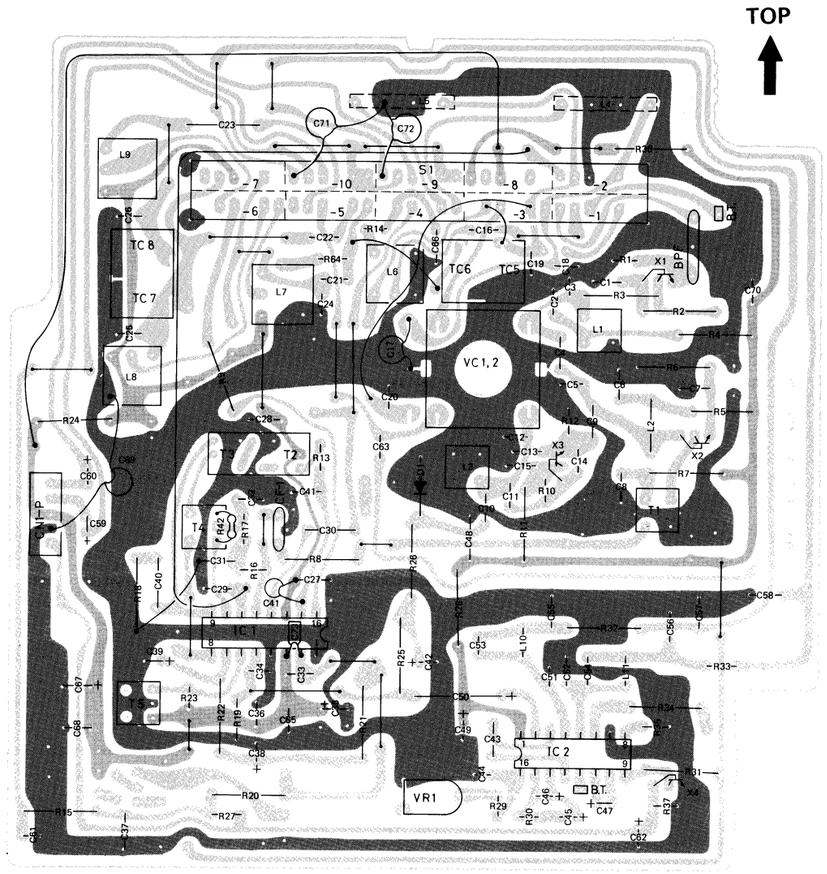


Fig. 28

Note: The circuit board assembly will not be available as spare part.

Transistors

Ref. No.	Parts No.	Description	Pc	fT
X1,2,3	2SC1923(O)	Silicon (TOSHIBA)	0.1W	
X4	2SD636(R)	" (MATSUSHITA)	0.4W	

ICs & Diodes

Ref. No.	Parts No.	Parts Name	Description
IC1	TA7614P	Integrated Circuit	TOSHIBA
IC2	AN7410	"	MATSUSHITA
D1	MA345	Variable Capacitance Diode	"

Resistors

Ref. No.	Parts No.	Parts Name	Description	
R1	QRD141K-392	Carbon	3.9kΩ	1/4W
R2	" -334	"	330kΩ	"
R3	" -470	"	47Ω	"
R4	" -101	"	100Ω	"
R5	" -564	"	560kΩ	"
R6	" -122	"	1.2kΩ	"
R7,8,9	" -101	"	100Ω	"
R10	QRD143K-334	"	330kΩ	"
R11	QRD141K-101	"	100Ω	"
R12	QRD143K-222	"	2.2kΩ	"
R13	" -471	"	470Ω	"
R14	" -220	"	22Ω	"
R15	QRD141K-332	"	3.3kΩ	"
R16	QRD143K-101	"	100Ω	"
R17	" -681	"	680Ω	"
R18	QRD141K-100	"	10Ω	"
R19	QRD143K-682	"	6.8kΩ	"
R20	QRD141K-332	"	3.3kΩ	"
R21	" -392	"	3.9kΩ	"
R22	" -182	"	1.8kΩ	"
R23	QRD143K-103	"	10kΩ	"
R24	QRD141K-470	"	47Ω	"
R25,26	" -104	"	100kΩ	"
R27	QRD143K-333	"	33kΩ	"
R28	QRD141K-4R7	"	4.7Ω	"
R29	QRD143K-183	"	18kΩ	"
R30	" -102	"	1kΩ	"
R31	QRD141K-153	"	15kΩ	"
R32,33	" -332	"	3.3kΩ	"
R34	" -681	"	680Ω	"
R35	QRD143K-183	"	18kΩ	"
R36	QRD141K-100	"	10Ω	"
R37	" -683	"	68kΩ	"
R42	QRD143K-822	"	8.2kΩ	"
VR1	QVP8A0B-014	Variable	10kΩ	B-curve

Capacitors

Ref. No.	Parts No.	Parts Name	Description
C1	QCF11HP-472	Ceramic	4700pF 50V
C2	" -102	"	1000pF "
C3	QCS11HJ-200	"	20pF "
C4,9	" -4R0	"	4pF "
C5	" -100	"	10pF "
C6	" -331	"	330pF "
C7,8	QCF11HP-223	"	0.022μF "
C10,11	QCT05CH-8R0	"	8pF "
C12	" -220	"	22pF "
C13	" -150	"	15pF "
C14	QCS11HJ-300	"	30pF "
C15	QCS11HP-472	"	4700pF "
C16,18	QCS11HJ-390	"	39pF "
C17	" -6R0	"	6pF "
C19,20	" -100	"	10pF "
C21	QFS41HJ-181	Polystyrol	180pF "
C22	QCS11HJ-361	Ceramic	360pF "
C23	QFS21HJ-472	Polystyrol	4700pF "
C24	QCS11HJ-390	Ceramic	39pF "
C25	QCT05YK-3R0	"	3pF "
C26	QCS11HJ-3R0	"	" "
C27,29	QFM41HM-223	Mylar	0.022μF "
C28	" -473	"	0.047μF "
C30	QCY41HK-682	Ceramic	6800pF "
C31	QCF11HP-473	"	0.047μF "
C32	" -223	"	0.022μF "
C33	QFM41HM-223	Mylar	" "
C34	QCS11HJ-121	Ceramic	120pF "
C35	QET41AR-477	Electrolytic	470μF 10V
C36,37	QFM41HM-473	Mylar	0.047μF 50V
C38	QET41HR-335	Electrolytic	3.3μF "
C39	QET41AR-336	"	33μF 10V
C40	QCF11HP-104	Ceramic	0.1μF 50V
C41	QCS11HJ-301	"	300pF "
C42	QEC41HM-104	Electrolytic	0.1μF "
C43	QFM41HM-473	Mylar	0.047μF "
C44	QFS41HJ-471	Polystyrol	470pF "
C45	QEC41HM-474	Electrolytic	0.47μF "
C46	" -224	"	0.22μF "
C47	QET41HR-474	"	0.47μF "
C48	QCF11HP-223	Ceramic	0.022μF "
C49	QET41CR-106	Electrolytic	10μF 16V
C50	QEW21HA-335	"	3.3μF 50V
C51,52	QFM41HM-153	Mylar	0.015μF "
C53,54	QCY41HK-152	Ceramic	1500pF "
C55,56,57,58	" -332	"	3300pF "
C59,60	QET41ER-475	Electrolytic	4.7μF 25V
C61	QFM41HM-472	Mylar	4700pF 50V
C62	QET41HR-335	Electrolytic	3.3μF "
C63	QCS11HJ-200	Ceramic	20pF "
C64	" -220	"	22pF "
C65	QFM41HM-683	Mylar	0.068μF "
C66	QCS11HJ-100	Ceramic	10pF "
C67	QET41AR-227	Electrolytic	220μF 10V
C68	QCF11HP-223	Ceramic	0.022μF 50V
C69,71,72	QCS11HJ-151	"	150pF "
C70	QFM41HM-223	Mylar	0.022μF "
C73	QFM41HK-223	Mylar	0.022μF 50V
VC1,2	QAP1224-512	Variable	
TC5-6,7-8	QAT2002-001	Trimmer	

Others

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description
L1	V03105-030	Coil	FM RF
L2	03226-1K	Inductor	FM IF Trap
L3	V03105-029	Coil	FM Osc.
L4,5	*VQB012B-303	Bar Antenna Ass'y	MW & LW
L6	VQR1014-301	Coil	SW Antenna
L7	*VQL1T05-302	"	LW Osc.
L8	QVM1T05-301	"	MW Osc.
L9	VQS1T05-302	"	SW Osc.
L10,11	VQP0002-393	Inductor	
T1,5	VQT7F12-104	I.F.T.	FM
T2,3	V03067-026	"	AM
T4	VQT7F11-202	"	FM
BPF	VBP1M3B-001	Band Pass Filter	FM Antenna
CF1	V03059-014	Ceramic Filter	FM IF
S1	QSSA401-002	Slide Switch	BAND
CN1-P	QMV5005-005	Connector	5-pin
B.T.	VKL3143-001	Board in Tab	

Amplifier Circuit Board Ass'y

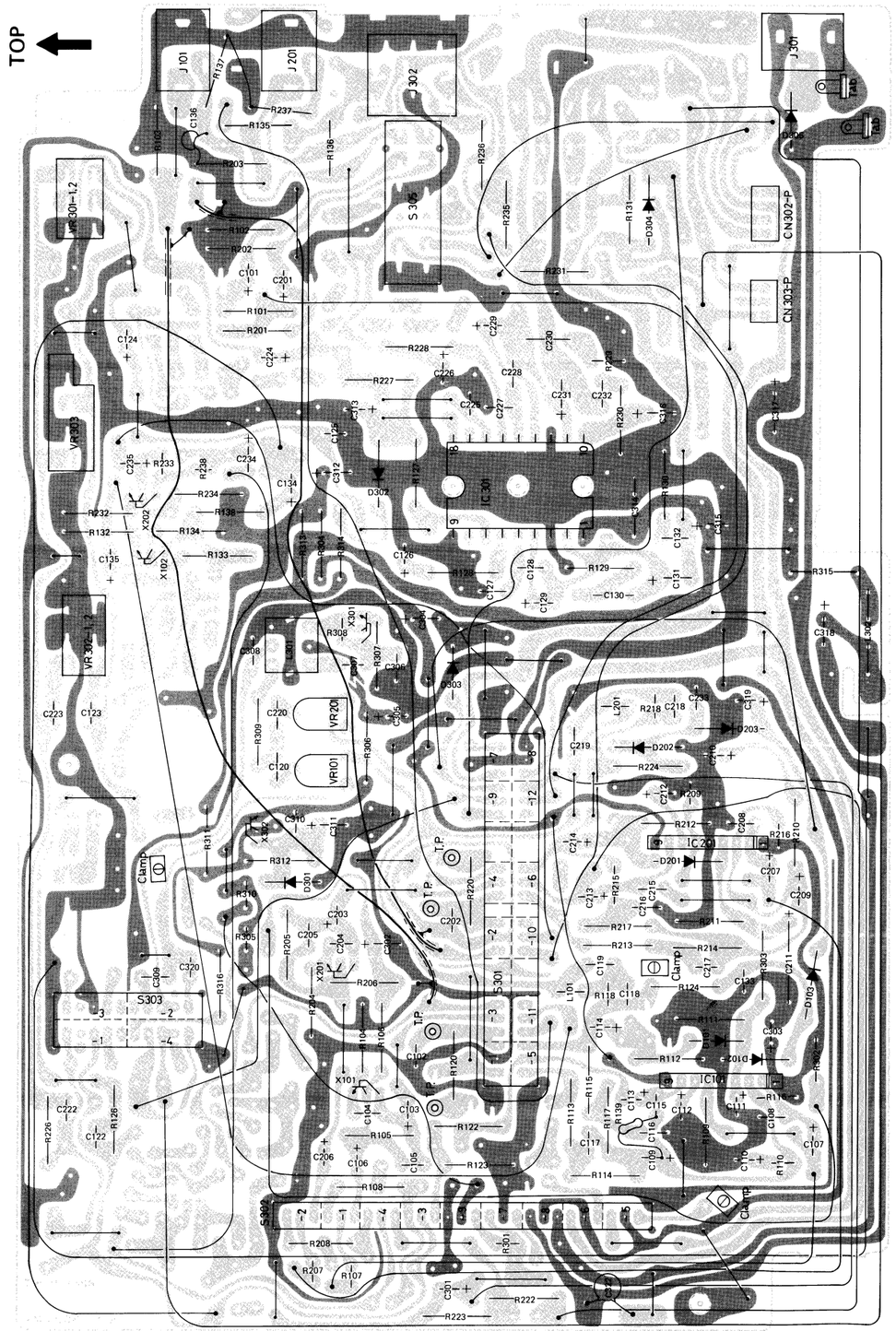


Fig. 29

Note: The circuit board assembly will not be available as spare part.

Transistor

Ref. No.	Parts No.	Description	Pc	fT
X101,201	2SD636(S)	Silicon (MATSUSHITA)	0.4W	
X102,202,301,302	2SD636(R)	〃 (〃)	〃	

ICs & Diodes

Ref. No.	Parts No.	Parts Name	Description
IC101,201	BA333(V)	Integrated Circuit	TOYO DENGU
IC301	AN7145(M)	〃	MATSUSHITA
D101,201	MA150	Silicon Diode	〃
D102,103,202,203	OA90	Germanium Diode	〃
D301	HZ6B	Zener Diode	HITACHI
D302,304	OA90	Germanium Diode	MATSUSHITA
D303	MA150	Silicon Diode	〃
D305	10E1	〃	J.I.R.C.

Resistors

Ref. No.	Parts No.	Parts Name	Description	
R101,201	QRD141K-222	Carbon	2.2kΩ	1/4W
R102,202	〃 -102	〃	1kΩ	〃
R103,203	〃 -103	〃	10kΩ	〃
R104,204	〃 -471	〃	470Ω	〃
R105,205	〃 -225	〃	2.2MΩ	〃
R106,206	〃 -153	〃	15kΩ	〃
R107,207	QRD143K-272	〃	2.7kΩ	〃
R108,208	QRD141K-104	〃	100kΩ	〃
R109	〃 -333	〃	33kΩ	〃
R110	QRD143K-101	〃	100Ω	〃
R111,211	QRD121J-106	〃	10MΩ	1/2W
R112,212	QRD141K-393	〃	39kΩ	1/4W
R113,213	〃 -822	〃	8.2kΩ	〃
R114,214	〃 -224	〃	220kΩ	〃
R115	〃 -682	〃	6.8kΩ	〃
R116,216	QRD143K-474	〃	470kΩ	〃
R117,217	QRD141K-822	〃	8.2kΩ	〃
R118,218	QRD143K-223	〃	22kΩ	〃
R120,220	QRD141K-100	〃	10Ω	〃
R122,222	〃 -683	〃	68kΩ	〃
R123,223	〃 -562	〃	5.6kΩ	〃
R124,224	〃 -272	〃	2.7kΩ	〃
R126,226	〃 -103	〃	10kΩ	〃
R127,227	〃 -473	〃	47kΩ	〃
R128,228	〃 -820	〃	82Ω	〃
R129,130,229,230	QRD121J-2R2	〃	2.2Ω	1/2W
R131,231	QRD141K-102	〃	1kΩ	1/4W
R132,232	〃 -101	〃	100Ω	〃
R133	〃 -155	〃	1.5MΩ	〃
R134,234	〃 -682	〃	6.8kΩ	〃
R135,235	〃 -103	〃	10kΩ	〃
R136	QRD143K-105	〃	1MΩ	〃
R137	〃 -152	〃	1.5kΩ	〃
R138	QRD141K-683	〃	68kΩ	〃
R139	QRD143K-472	〃	4.7kΩ	〃
R209	〃 -333	〃	33kΩ	〃
R210	QRD141K-101	〃	100Ω	〃

Ref. No.	Parts No.	Parts Name	Description
R215	QRD143K-682	Carbon	6.8kΩ 1/4W
R233	〃 -155	〃	1.5MΩ 〃
R236	QRD141K-105	〃	1MΩ 〃
R237	〃 -152	〃	1.5kΩ 〃
R238	QRD143K-683	〃	68kΩ 〃
R301,302	〃 -102	〃	1kΩ 〃
R303	QRD141K-564	〃	560kΩ 〃
R304	〃 -151	〃	150Ω 〃
R305	QRD143K-121	〃	120Ω 〃
R306	QRD146K-330	〃	33Ω 〃
R307	〃 -150	〃	15Ω 〃
R308	QRD143K-333	〃	33kΩ 〃
R309	QRD141K-822	〃	8.2kΩ 〃
R310	QRD146K-4R7	〃	4.7Ω 〃
R311	〃 -100	〃	10Ω 〃
R312	QRD141K-331	〃	330Ω 〃
R313	〃 -221	〃	220Ω 〃
R314	〃 -471	〃	470Ω 〃
R315	QRD121J-1R0	〃	1Ω 1/2W
R316	QRD141K-473	〃	47kΩ 1/4W
VR101,201	QVP8A0B-054	Variable	50kΩ, B-curve
VR301	QVD8A2A-024VM	〃	20kΩ, A-curve (VOLUME)
VR302	QVD7A2A-024VM	〃	〃 〃 (TONE)
VR303	QVG4A2W-A54VM	〃	50kΩ W-curve (BALANCE)

Capacitors

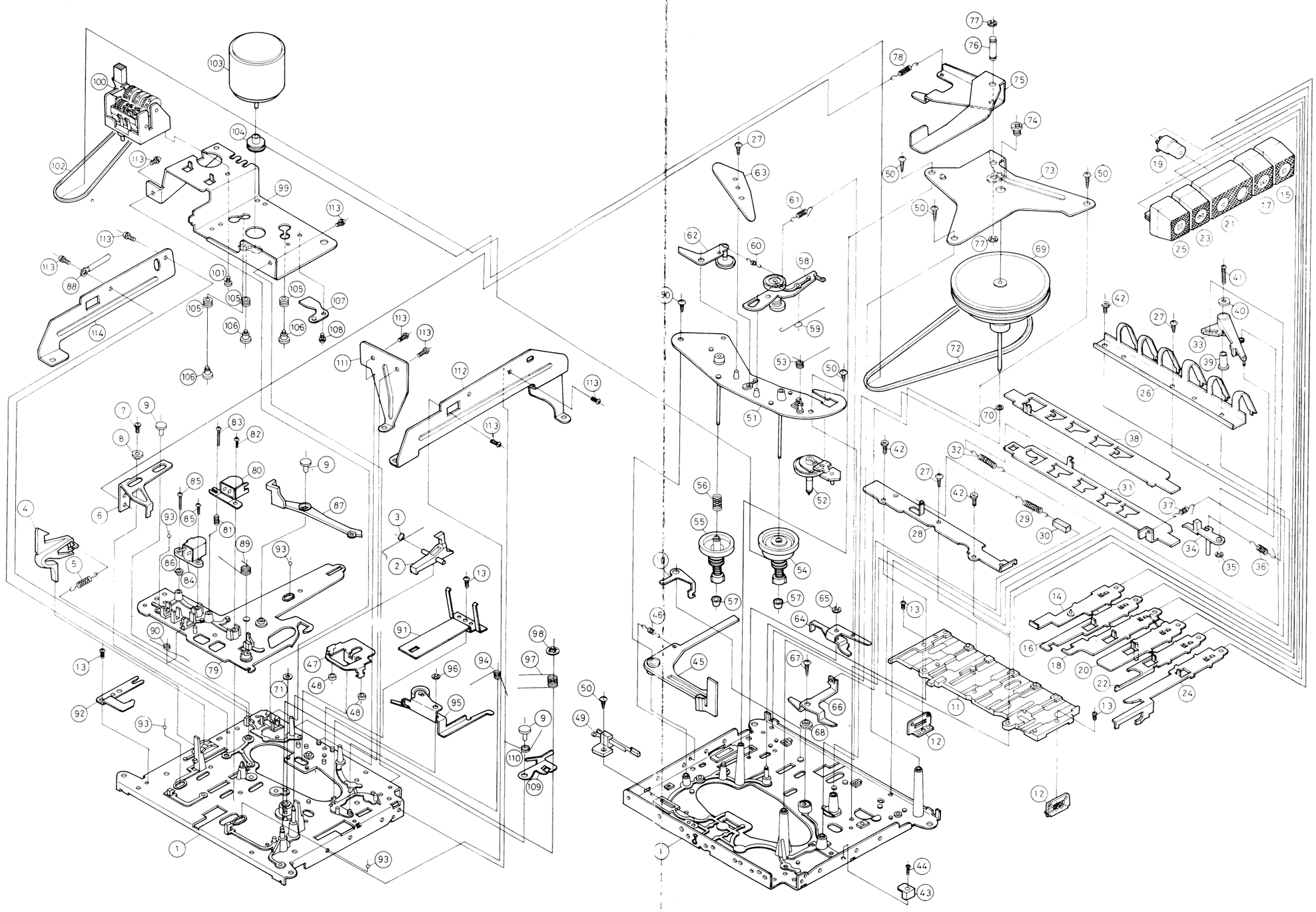
Ref. No.	Parts No.	Parts Name	Description
C101,201	QET41HR-474	Electrolytic	0.47μF 50V
C102,202	QCY41HK-681	Ceramic	680pF 〃
C103,203	QEB41EM-105N	Electrolytic	1μF 25V
C104,204	QCF11HP-102	Ceramic	1000pF 50V
C105,205	QCS11HK-330	〃	33pF 〃
C106,107,206,207	QET41HR-474	Electrolytic	0.47μF 〃
C108,208	QCY41HK-102	Ceramic	1000pF 〃
C109,209	QET41CR-106	Electrolytic	10μF 16V
C110,210	QET41AR-336	〃	33μF 10V
C111	QET41ER-475	〃	4.7μF 25V
C112,212	QET41AR-476	〃	47μF 10V
C113,213	QET41ER-475	〃	4.7μF 25V
C114,214	QET41HR-474	〃	0.47μF 50V
C115	QCS11HJ-451	Ceramic	450pF 〃
C116,216	QCY41HK-272	〃	2700pF 〃
C117,217	QFM41HK-153	Mylar	0.015μF 〃
C118,218	QFM41HJ-182	〃	1800pF 〃
C119,219	QCS11HJ-501	Ceramic	500pF 〃
C120,220	QCS11HK-331	〃	330pF 〃
C122,222	QCY41HK-472	〃	4700pF 〃
C123,223	QFM41HK-333	Mylar	0.033μF 〃
C124,224	QEC41HM-224	Electrolytic	0.22μF 〃
C125,225	QCY41HK-681	Ceramic	680pF 〃
C126,226	QET41AR-476	Electrolytic	47μ 10V
C127,227	QCS11HK-201	Ceramic	200pF 50V
C128,228	〃 -101	〃	100pF 〃
C129,229	QET41AR-107	Electrolytic	100μF 10V
C130,230	QFM41HM-104	Mylar	0.1μF 50V
C131,231	QET41AR-477	Electrolytic	470μF 10V
C132,232	QFM41HK-683	Mylar	0.068μF 50V
C133,233	QCF11HP-103	Ceramic	0.01μF 〃
C134,234	QET41HR-474	Electrolytic	0.47μF 〃
C135,235	QET41ER-475	〃	4.7μF 25V
C136	QCY41HK-152	Ceramic	1500pF 50V
C211	QEW21EA-475	Electrolytic	4.7μF 25V
C215	QCS11HK-151	Ceramic	150pF 50V
C301	QET41AR-107	Electrolytic	100μF 10V
C302	〃 -337	〃	330μF 〃
C303,305	〃 -227	〃	220μF 〃
C304	〃 -477	〃	470μF 〃
C306,310	QFM41HK-223	Mylar	0.022μF 50V
C307	〃 -222	〃	2200pF 〃
C308	QCY41HK-681	Ceramic	680pF 〃
C309	QCS11HJ-301	〃	300pF 〃
C311	QET41AR-337	Electrolytic	330μF 10V
C312	QET41CA-108	〃	1000μF 16V
C313	QET41AR-107	〃	100μF 10V
C314	QFM41HM-224	Mylar	0.22μF 50V
C315	QET41HR-474	Electrolytic	0.47μF 〃
C316	QET41CR-227	〃	220μF 16V
C317	〃 -228	〃	2200μF 〃
C318	〃 -477	〃	470μF 〃
C319	〃 -106	〃	10μF 〃
C320	QCS11HJ-181	Ceramic	180pF 50V
C322	QCS11HK-151	〃	150pF 〃

Others

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description
L101 201	QVP0002-103	Inductor	10mH Bias Trap
L301	V03083-020	Coil	Bias Osc.
L302	T41572-001	Inductor	Choke
S301-1～-12	QSSC201-106	Slide Switch	RECORD-PLAY
S302-1～-9	QSS9201-002	〃	FUNCTION
S303-1～-3	QSS4301-021	〃	MODE
S305	QSP4210-061	Push Switch	DIN
J101,201	QMS3501-014	Jack Ass'y	MIC
J102,202	*VMJ4007-001	Jack Board Ass'y	External Speaker
J301	QMA0921-005	Jack Ass'y	DC 9V
J302	QMC9014-006	DIN Jack	
CN302-P	QMV5004-004	Connector	4-pin (for speakers)
CN303-P	〃 -003	〃	3-pin (for meter)
Clamp	V44691-001	Wire Clamp	
Tab	V43895-1	Tab	
T.P	A74138-2	Test Pin	
	*VYH4295-002	Radiation	Head Sink for IC301

Exploded View of Cassette Mechanism



List of Cassette Mechanism

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	TGC357101-0E	Chassis Base Ass'y		1
2	TEP357406-01	Record Safety Lever		1
3	TFW357471-01	Record Safety Lever Spring		1
4	VKS4101-001	Eject Lever		1
5	VKW3000-010	Tension Spring		1
6	TFB357408-03	Record Push Bar		1
7	LPSP2606Z	Ass'y Screw		1
8	VKH3001-015	Flange Collar		1
9	TEP357469-02	Stopper		3
10	VKL4151-001	Record Lock Lever		1
11	TEP357103-01	Push Bar Case		1
12	VKL4311-001	Cam Guide Bracket		2
13	SPSP2604Z	Screw		4
14	TGB361402-0A	Stop Eject Bar Ass'y		1
15	*VXP3022-001	Push Button	STOP/EJECT	1
16	TFB357411-02	Rewind Bar		1
17	*VXP3022-002	Push Button	REVIEW	1
18	TFB357412-02	Record Bar		1
19	*VXP3024-001	Push Button	RECORD	1
20	TGB357413-0B	Play Bar Ass'y		1
21	*VXP3023-001	Push Button	PLAY	1
22	TFB357416-02	FF Bar		1
23	*VXP3022-003	Push Button	CUE	1
24	TFB361405-01	Pause Bar		1
25	*VXP3022-004	Push Button	PAUSE	1
26	TFB357301-04	Button Spring		1
27	SBSB2606Z	Tapping Screw		3
28	TFB357418-02	Push Bar Plate		1
29	T30300-211	Tension Spring		1
30	TJN265559-04	Silencer		1
31	*VKL3160-001	Push Bar Cam (1)		1
32	T30300-140	Tension Spring		1
33	*VKS4141-00A	Auto Stop Arm Ass'y		1
34	TEP357420-03	Auto Stop Kick Lever		1
35	REE1500	E-Ring		1
36	*VKW3002-017	Tension Spring		1
37	*VKW3002-011	〃		1
38	VKL3148-001	Push Bar Cam (2)		1
39	*VKH3001-018	Flange Collar		1
40	Q03091-154	Washer		1
41	SPBP2620N	Screw		1
42	SDSP2608N	〃		3
43	TEP361406-01	Pause Bar Guide		1
44	SPSP2008Z	Screw		1
45	TEP357422-05	Brake Lever		1
46	T30300-204	Tension Spring		1
47	VKL4248-001	Brake Bar		1
48	TER313493-01	Brake Rubber		2
49	V31162-001	Leaf Switch	S304	1
50	SBSB2608Z	Screw		6
51	TGB357305-0A	Reel Disk Bracket Ass'y		1
52	TGP357425-0D	Take-up Bar Ass'y		1
53	TFW357430-02	Take-up Bar Spring		1
54	TGP357431-0D	Reel Disk Ass'y	Take-up	1
55	TGP357431-0C	〃	Supply	1

Ref. No.	Parts No.	Parts Name	Description	Q'ty
56	VKW3001-018	Compression Spring	Back Tension	1
57	TEP357437-02	Reel Stopper		2
58	TGB357438-0A	FF Arm Ass'y		1
59	TFW357446-01	FF Arm Spring		1
60	T30300-205	Tension Spring		1
61	VKW3002-001	〃		1
62	TGB357447-0A	Rewind Idler Arm Ass'y		1
63	VKL4312-001	Arm Stopper		1
64	TFB357452-02	Rewind Lever		1
65	REE2500	E-Ring		1
66	TFB357453-01	FF Lever		1
67	GPSA2608Z	Washer Head Tapping Screw		1
68	VKH4103-001	Collar		1
69	*VKF3108-00A	Flywheel Ass'y		1
70	Q03093-611	Washer	Thrust	1
71	〃 -522	〃	Oil Cut	1
72	VKB3000-006H	Belt		1
73	*VKL4387-001	Flywheel Bracket		1
74	TEP357456-01	Thrust Screw		1
75	*VKL4388-001	Record Lever		1
76	*VKH4201-001	Shaft	for Record Lever	1
77	REE3000	E-Ring		2
78	*VKW3000-027	Tension Spring		1
79	TGB357202-0B	Head Base Ass'y		1
80	V03078-043	Play-Record Head		1
81	T30301-148	Compression Spring		1
82	SPSB2006Z	Tapping Screw		1
83	SPSX2012Z	Screw		2
84	V03078-041	Erase Head		1
85	SPSB2008Z	Tapping Screw		1
86	VKH4120-001	Erase Head Collar		1
87	TEP357458-01	Auto Stop Lever		1
88	VKZ4001-007	Wire Holder		1
89	TFW357467-003	Head Base Spring		1
90	TFW361408-01	Record Lock Lever Spring		1
91	TFP357459-01	Pack Spring		1
92	TFP357460-03	Head Base Spring Plate		1
93	T41615-004	Steel Ball		4
94	TFW357470-02	Take-up Spring		1
95	TGB361409-0B	Pinch Roller Arm Ass'y		1
96	REE2500	E-Ring		1
97	TFW357463-02	Pinch Roller Spring		1
98	RDS3000F	CS-Ring		1
99	*VKL3166-001	Motor Counter Bracket		1
100	*VKC5118-001S	Counter		1
101	SPSP3006ZS	Screw		1
102	TEB357454-02	Belt	Counter	1
103	*MMI-6E9MD	Motor		1
104	*VKR4122-002	Motor Pulley		1
105	TER357465-02	Cushion Rubber		3
106	VKZ4109-001	Motor Screw		3
107	TFB357466-01	Motor Cushion Stopper		1
108	LPSP2604Z	Ass'y Screw		1
109	VKL4228-001	Pause Lock Cam		1
110	VKW4127-001	Pause Lock Cam Spring		1

— Continued on page 22 —

Connector Circuit Board Ass'y

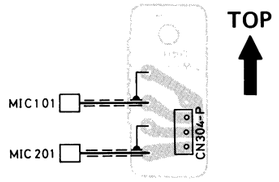
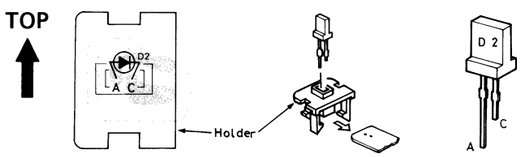


Fig. 31

Note: The circuit board assembly will not be available as spare part.

Ref. No.	Parts No.	Parts Name	Description
CN304-P MIC101,201	QMV5005-003 VMME62N-023	Connector Condenser Microphone	3-pin

LED Circuit Board Ass'y



A : Anode
C : Cathode

Fig. 32

Diode

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description
D2	*LN217RP	Light Emitting Diode	MATSUSHITA

Others

Ref. No.	Parts No.	Parts Name	Description
Holder	*VYH4305-001	LED Holder	

— Continued from page 21 —

Ref. No.	Parts No.	Parts Name	Description	Q'ty
111	*VKL4391-001	Bracket		1
112	*VKL4389-001	Side Bracket (R)		1
113	LPSP2605Z	Ass'y Screw		8
114	*VKL4390-001	Side Bracket (L)		1
115			Blank No.	

Power Supply Circuit Board Ass'y

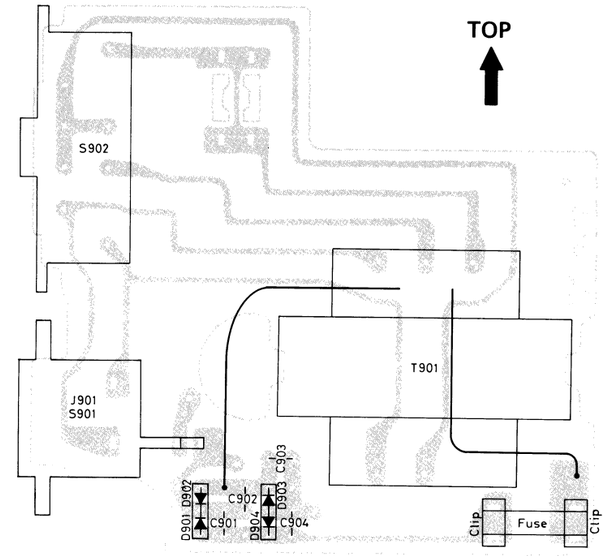


Fig. 33

Note: The circuit board assembly will not be available as spare part.

Diodes

Ref. No.	Parts No.	Parts Name	Description
D901,902 D903,904	DS131A DS132A	Silicon (SANYO) 〃 (〃)	Rectifier Stack 〃

Capacitors

Ref. No.	Parts No.	Parts Name	Description
C901~904	QCF11HP-103	Ceramic	0.01μF 50V

Others

Ref. No.	Parts No.	Parts Name	Description
J901, S901	QMC0263-002	AC Socket Ass'y	⚠ for RC-545L
〃	QMC0263-002BS	〃	⚠ for RC-545LB
S902	QSS2325-101	Slide Switch	⚠ for RC-545L
〃	QSS2325-101BS	〃	⚠ for RC-545LB
T901	VTP48N2-90F	Power Transformer	⚠ for RC-545L
〃	VTP48N2-90FBS	〃	⚠ for RC-545LB
Clip	A44594-001	Fuse Clip	
Fuse	QMF51A2-1R0	Fuse	⚠ for RC-545L
〃	QMF41A2-1R0BS	〃	⚠ for RC-545LB

Note: The parts marked ⚠ are the important parts for safety assurance.
Use the specified part, when replacing the safety assurance part, never use an equivalent one.

Exploded View of Tuner Chassis Ass'y

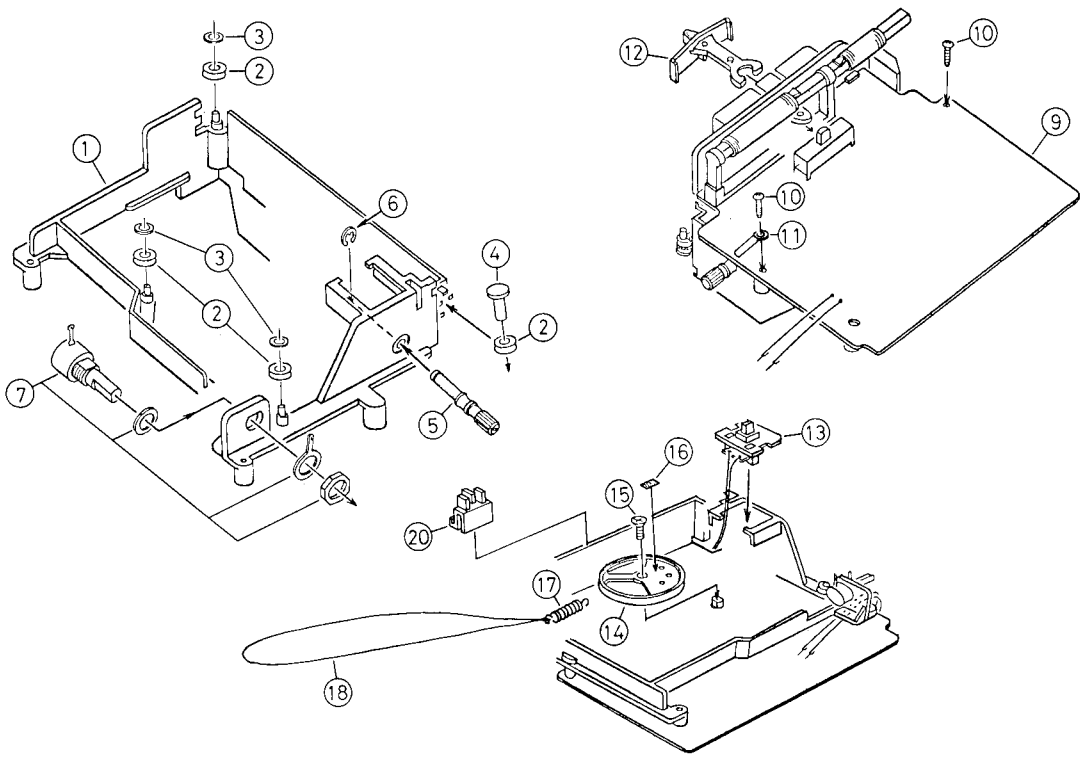


Fig. 34

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	*VYH2111-003	Chassis Base		1
2	VYH4002-001	Roller		4
3	V42562-1	Special Washer		3
4	RTA4008	Rivet		1
5	V41336-13	Tuning Shaft		1
6	REE3000	E-Ring		1
7	*QAT5001-203	Midget Variable Capacitor	VC3 (Fine Tuning)	1
8			Blank No.	
9	*————	Circuit Board Ass'y	Tuner	1
10	SBSB3010Z	Tapping Screw		2
11	VKZ4001-007	Wire Holder		1
12	*VXQ3018-002	Toggle Lever	BAND Selector	1
13	*————	Circuit Board Ass'y	LED	1
14	QZD1108-002	Dial Drum		1
15	SSSP2608Z	Screw		1
16	VYSA1R6-021	Spacer	Glued (Sticker)	1
17	50153-3	Spring		1
18	VHR2TT9-06A	Dial Cord		1
19			Blank No.	
20	*VJN4021-001	Pointer Holder		1

Exploded View of Amplifier Section

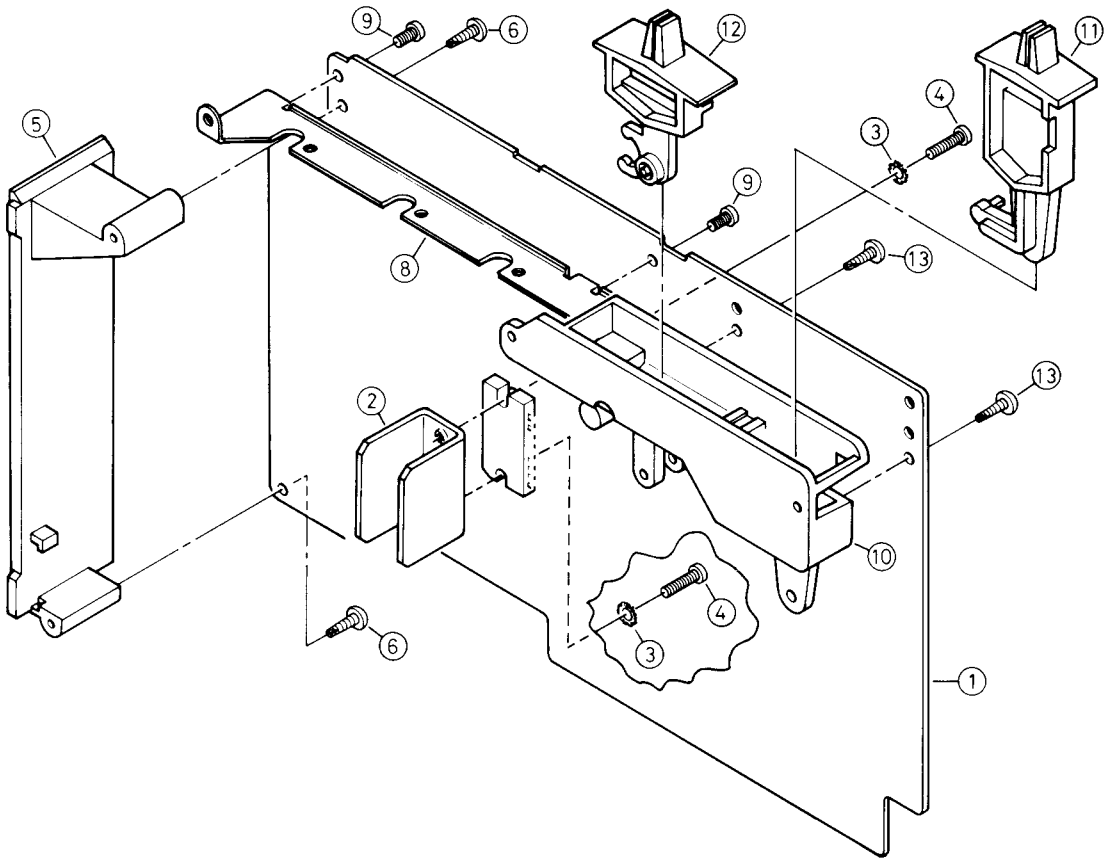


Fig. 35

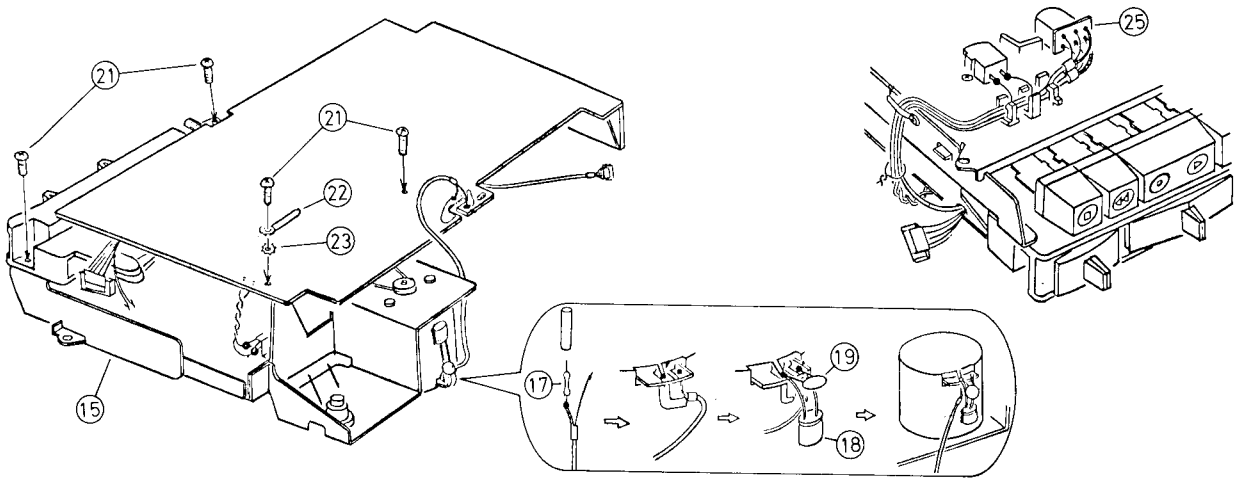


Fig. 36

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	*————	Circuit Board Ass'y	Amplifier	1
2	VYH4295-002	Radiation	Heat Sink	1
3	WBS3000	Toothed Lock Washer		2
4	SPSP3012ZS	Screw		2
5	*VMJ4007-001	Jack Board Ass'y		1
6	SBSB3010Z	Tapping Screw		2
7			Blank No.	
8	*VYH4311-001	Volume Bracket		1
9	SPSP3006ZS	Screw		2
10	*VYH3144-001	Holder		1
11	*VXQ3019-001	Toggle Lever	FUNCTION	1
12	*VXQ3020-002	〃	MODE	1
13	SBSB3010Z	Tapping Screw		2
14			Blank No.	
15	*————	Cassette Mechanism Ass'y		1
16			Blank No.	
17	T41572-001	Inductor	L303	1
18	QET41CR-107	Electrolytic Capacitor	C321 (100μF, 16V)	1
19	QCS11HJ-301	Ceramic Capacitor	C323 (300pF, 50V)	1
20			Blank No.	
21	SPSP3006VS	Screw		4
22	VKZ4001-007	Wire Holder		1
23	WBS3000	Toothed Lock Washer		1
24			Blank No.	
25	VMW3035-201	Printed Circuit Board		1

Exploded View of Front Cabinet

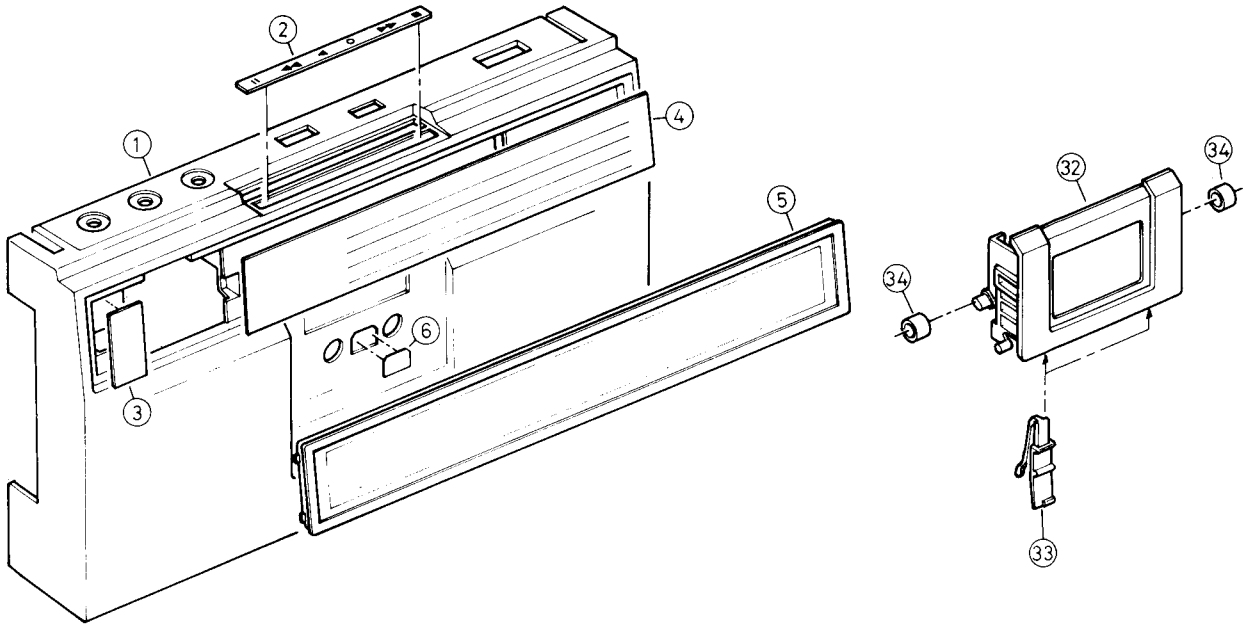


Fig. 37

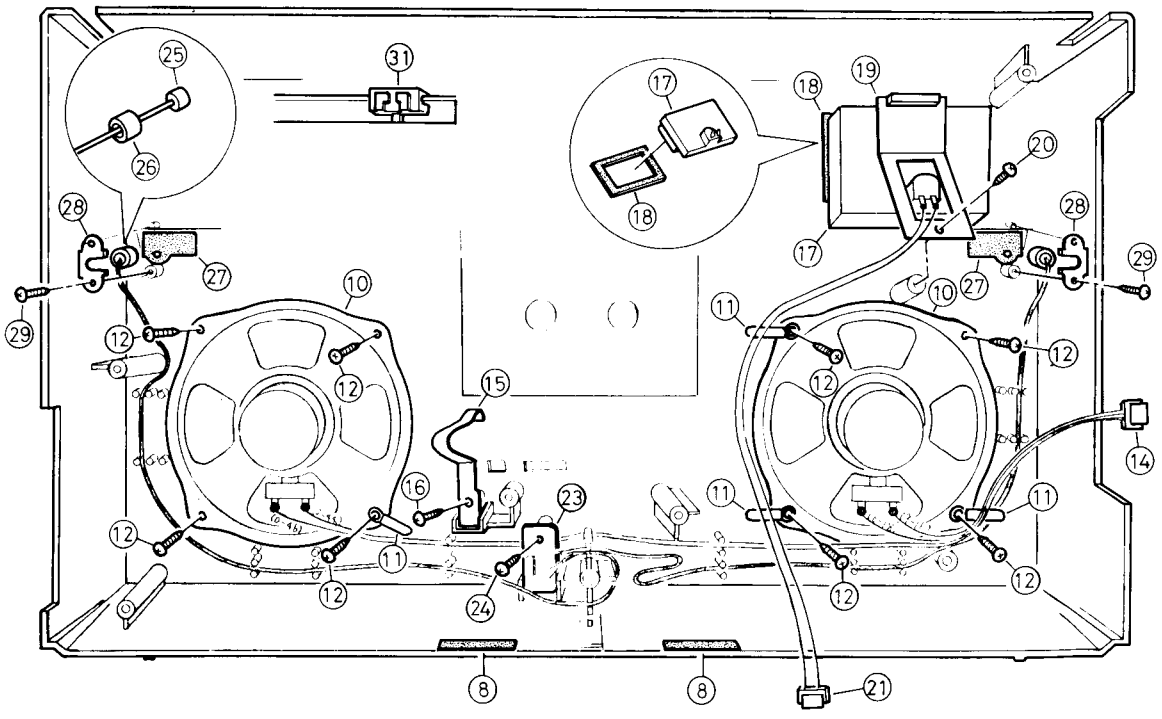


Fig. 38

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1~8	*ZCRC545L-CBF	Front Cabinet Ass'y	for both RC-545L & LB	1
1	*VJC1056-002	Front Cabinet		1
2	*VJD4238-002	Plate	Glued	1
3	*VJD4001-002	"	"	1
4	*VJK2117-003	Dial Scale	"	1
5	*VJK3116-001	Dial Lens	"	1
6	V44957-001	Reflection Plate	"	1
7			Blank No.	
8	VYSA1R4-050	Spacer	Glued (Sticker)	2
9			Blank No.	
10	*EAS-12P126SH	Speaker	12cm (5"), 3.2Ω	2
11	VKZ4001-007	Wire Holder		4
12	SBSB3008Z	Tapping Screw		8
13			Blank No.	
14	*VDM5049-004-003	Connector & Wire Ass'y	CN302-S	1
15	*VKY4101-002	Door Spring		1
16	SBSB3010Z	Tapping Screw		1
17	*VGM0120-007	Meter		1
18	VYH4205-001	Meter Rubber		1
19	*VYH4320-001	Meter Holder		1
20	SBSB3010Z	Tapping Screw		1
21	*VDM5049-004-004	Connector & Wire Ass'y	CN303-S	1
22			Blank No.	
23	*————	Circuit Board Ass'y	Connector	1
24	SBSB3010Z	Tapping Screw		1
25	VMME62N-023	Condenser Microphone	MIC 101,201	2
26	VYH4102-001	Microphone Bushing		2
27	*VYTA437-001	Blind		2
28	*VYH4298-001	Holder		2
29	SBSB3010Z	Tapping Screw		2
30			Blank No.	
31	*VJN4022-001	Pointer		1
32	*VJT4011-00B	Cassette Case		1
33	*V44910-002	Cassette Spring		2
34	V41405-004	Rubber Ring		2

Exploded View of Rear Cabinet (RC-545L)

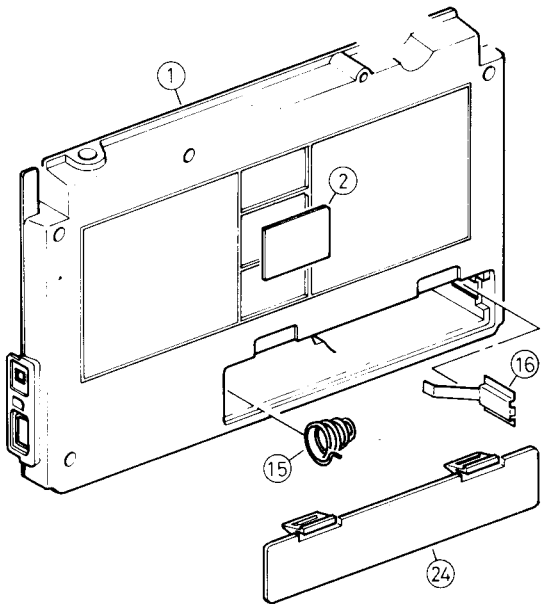


Fig. 39

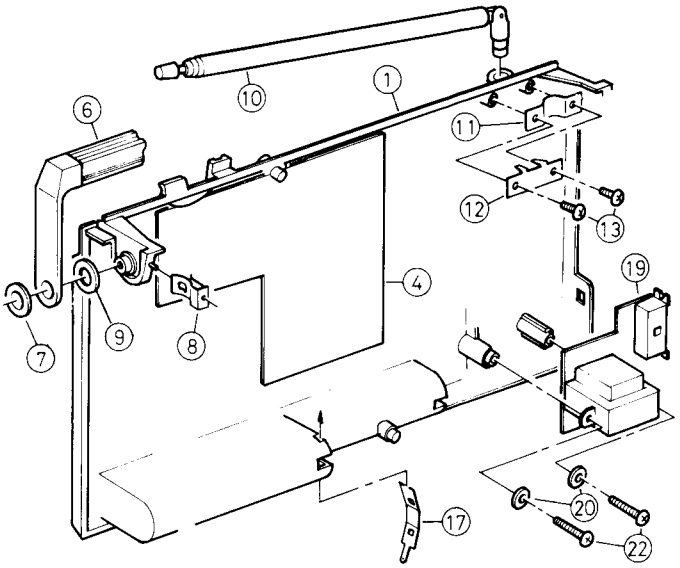


Fig. 40

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1~4	*ZCRC545L-CBR	Rear Cabinet Ass'y		1
1	*VJC1057-001	Rear Cabinet		1
2	*VYN5049-004C	Name Plate	Glued	1
3			Blank No.	
4	*VYH4300-00A	Shield Ass'y	Glued	1
5			Blank No.	
6	*VJH4011-00A	Handle		1
7	Q03095-236	Washer		2
8	*VKY4154-001	Spring		2
9	Q03093-521	Washer		2
10	QZR4333-001	Rod Antenna		1
11	V44195-002	Rod Antenna Holder (A)		1
12	VYH4189-001	" (B)		1
13	SBSB3008Z	Tapping Screw		2
14			Blank No.	
15	53738-1	Battery Spring		1
16	VYH4104-002	Contact		1
17	VYH4010-003	"		1
18			Blank No.	
19	*————	Circuit Board Ass'y	Power Supply	1
20	Q03091-138	Washer		2
21			Blank No.	
22	SBSB3014C	Tapping Screw		2
23			Blank No.	
24	*ZCRC545-BCA	Battery Cover Ass'y		1

Exploded View of Rear Cabinet (RC-545LB)

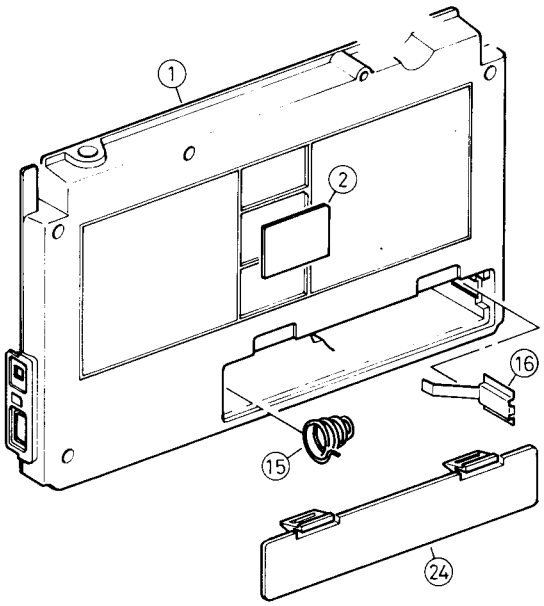


Fig. 41

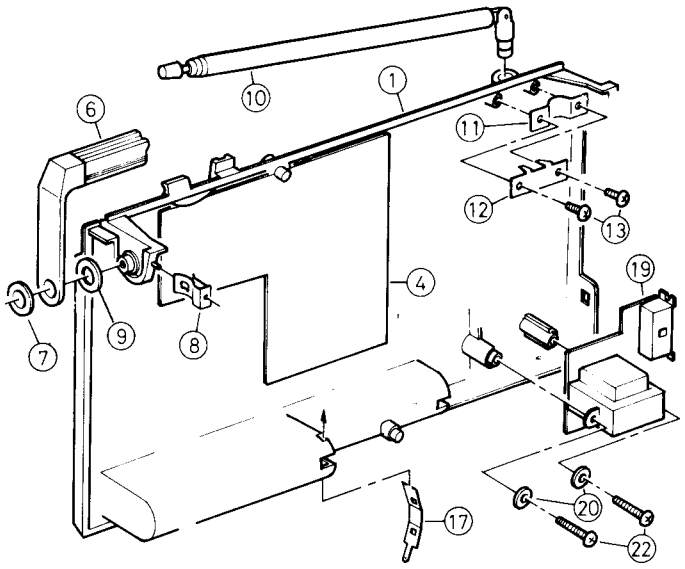


Fig. 42

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1~4	*ZCRC545LB-CBR	Rear Cabinet Ass'y		1
1	*VJC1057-001	Rear Cabinet		1
2	*VYN5049-003CBS	Name Plate	Glued	1
3			Blank No.	
4	*VYH4300-00A	Shield Ass'y	Glued	1
5			Blank No.	
6	*VJH4011-00A	Handle		1
7	Q03095-236	Washer		2
8	*VKY4154-001	Spring		2
9	Q03093-521	Washer		2
10	QZR4333-001	Rod Antenna		1
11	V44195-002	Rod Antenna Holder (A)		1
12	VYH4189-001	" (B)		1
13	SBSB3008Z	Tapping Screw		2
14			Blank No.	
15	53738-1	Battery Spring		1
16	VYH4104-002	Contact		1
17	VYH4010-003	"		1
18			Blank No.	
19	*————	Circuit Board Ass'y	Power Supply	1
20	Q03091-138	Washer		2
21			Blank No.	
22	SBSB3014C	Tapping Screw		2
23			Blank No.	
24	*ZCRC545-BCA	Battery Cover Ass'y		1

Final Packing Ass'y (RC-545L)

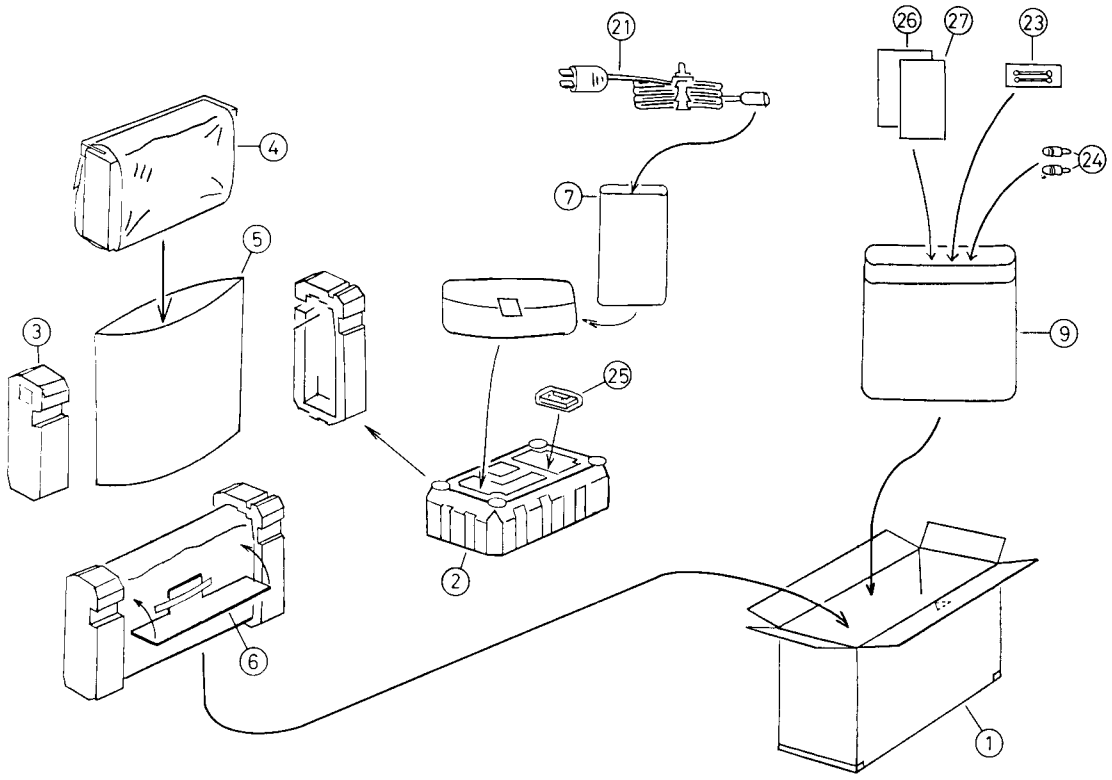


Fig. 43

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	*VPD5049-J04	Carton Box		1
2	VPH1157-001	Side Cushion (R)		1
3	*VPH1161-001	" (L)		1
4	VHPJ079-036	Wrapping Paper		1
5	QPGA060-05005	Polyethylen Bag		1
6	*VPH4101-003	Protector	for Cassette Door	1
7	QPGA012-01505	Polyethylen Bag	for Power Cord	1
8			Blank No.	
9	QPGB024-03404	Polyethylen Bag	for Instruction Book	1

Accessories (RC-545L)

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
21	QMP3950-183	Power Cord	⚠ (Safety Assurance Part)	1
22			Blank No.	
23	*VYA4001-00A	Head Cleaning Stick		1 set
24	V04056-1	Shorting Plug		2
25	VGT12S2-J03	Cassette Tape		1
26	*VNM0726-301	Instruction Book		1
27	*VNC6305-001	Troubleshooting Chart		1
	*VNF0724-001	Feature Sticker	Glued on Cassette Door	1

Final Packing Ass'y (RC-545LB)

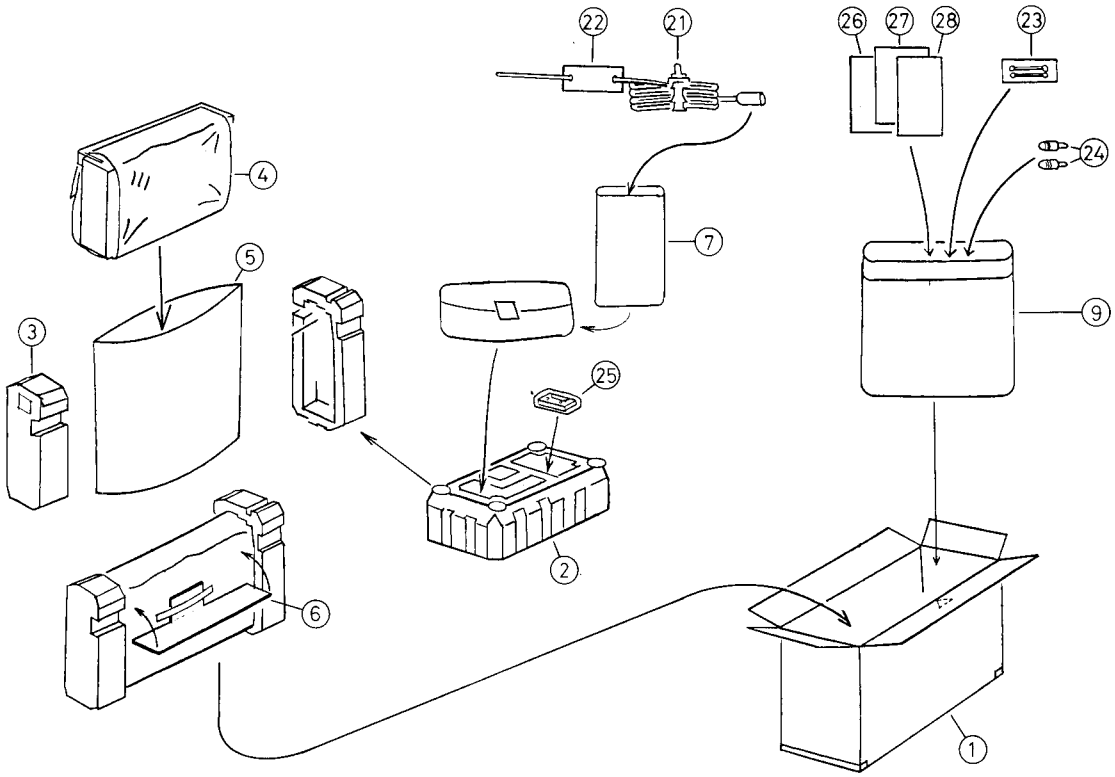


Fig. 44

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	*VPD5049-J03	Carton Box		1
2	VPH1157-001	Side Cushion (R)		1
3	*VPH1161-001	" (L)		1
4	VHPJ079-036	Wrapping Paper		1
5	QPGA060-05005	Polyethylen Bag		1
6	*VPH4101-003	Protector	for Cassette Door	1
7	QPGA012-01505	Polyethylen Bag	for Power Cord	1
8			Blank No.	
9	QPGB024-03404	Polyethylen Bag	for Instruction Book	1

Accessories (RC-545LB)

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
21	QMP9017-009BS	Power Cord	⚠ (Safety Assurance Part)	1
22	QZL1002-003BS	Warning Level	⚠	
23	*VYA4001-00A	Head Cleaning Stick		1 set
24	V04056-1	Shorting Plug		2
25	VGT12S2-J03	Cassette Tape		1
26	*VNM0726-301	Instruction Book		1
27	*VNC6305-001	Troubleshooting Chart		1
28	BT20013B	Guarantee Certificate		1
	*VNF0724-001	Feature Sticker	Glued on Cassette Door	1